Royal

110**cx**

Cash Management System

Owners Manual

8 Departments / 99 PLUs
4 Clerk Totals
Automatic Tax Computation
4 Tax Tables
Currency Conversion
Security features

Programmable Electronic Cash Register

Easy Set-Up Instructions
see page 12

WELCOME...

to the Royal family of fine business machines.
We sincerely hope you will enjoy the many benefits
of being associated with a distinguished product
name that has represented both quality and
customer satisfaction since 1905.

This electronic cash register is designed to help your business function smoothly by providing efficient register operations and accurate management reports. Start-up is quick and easy, yet there are many options that can be added and revised so that you can customize your operations for optimum productivity. Here are just a few of the register's many valuable features:

- 8 departments and 99 PLU settings
- 4 Clerk Totals
- Security system
- Choice of Journal or Customer Receipt printout
- Automatic tax computation for tax rate (Canadian Tax and VAT - 4 Rates)
- Up to 4 Tax Tables
- Currency Conversion
- Department-linked entry options that streamline and speed-up operation
- Periodic management reporting systems
- Battery back-up / memory protection of records

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INTRODUCING ... YOUR CASH REGISTER

STANDARD ACCESSORIES

The following are included in the box with your cash register:

- 1 black plastic journal winder spindle
- 1 roll of standard paper tape
- 1 ink roll (already installed)
- 2 Cash Drawer / Journal Lock keys
- Instruction Manual
- Quick Start Sheet

USING THIS MANUAL

Your Cash Register manual is organized for easy reference. The front portion contains general information on all features and functions of the cash register. Instructions for setting the optional programs are next. Transaction examples for operating the register are at the back of the manual. Use the **TABLE OF CONTENTS** to locate a particular item.

Throughout this manual, references to the keypad are shown bolded and in brackets. References to the operational keys are preceded by the word "press". For example: Press [SUBTOTAL]. Or: Press [DEPARTMENT 1]. References to the numeric keypad are preceded by the word "type". For example: Type the number [1].

GETTING STARTED

Important note: The cash register must be first plugged in before installing the back-up batteries.

Before you begin to operate the register or set the programs, check **SETTING UP AND MAINTAINING THE CASH REGISTER** for installation information. Review **KEYPAD FUNCTIONS, THE CONTROL SYSTEM** and **THE DISPLAY** to become familiar with their operations.

NOTE: Programs and transaction information for management reports are stored in the memory of the cash register. The batteries must be installed to save this information.

SETTING THE REGISTER PROGRAM

Transaction examples provide steps for key operations. Sample receipts are included.

Royal's helpful "Quick Start" program (Page 12) will provide you with the most basic programming options for the operation of your new cash register. Many users find "Quick Start" the best way to begin to learn about the many capabilities of the machine.

OfficeZone www.officezone.com 1-800-543-5454

SPECIFICATIONS AND SAFETY

MODEL:	Royal 110cx
TYPE:	Electronic cash register with printer and 8 departments.
DISPLAY:	Single LCD Display. Cashier only. Symbols for error, change, subtotal, minus, total and item count.
CAPACITY:	7 digits input and readout.
PRINTER:	ECR exclusive serial printer.
INK SOURCE:	Black Ink Roll (ROYAL brand PCUA #013109)
PAPER SUPPLY:	57MM (2 1/4" Single-Ply Register Tape (ROYAL brand PCUA 013129)
MEMORY BATTERY PROTECTION:	Approximately 30 days after power interruption.
TECHNOLOGY:	CMOS RAM
POWER CONSUMPTION:	Standby - 15W, Operating - 47W
OPERATING TEMPERATURE:	0-40 Degrees Centigrade (32-104 Degrees Fahrenheit)
DIMENSIONS:	16 3/4" x 12 3/4" x 10 1/4"
WEIGHT:	13 lbs.

SAFETY NOTICE

The main outlet for this cash register must be located near the unit and easily accessible.

Do not use this cash register outdoors in the rain or near any source of liquid.

WARNING

"This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference."

SETTING UP AND MAINTAINING THE CASH REGISTER

SETTING UP YOUR CASH REGISTER

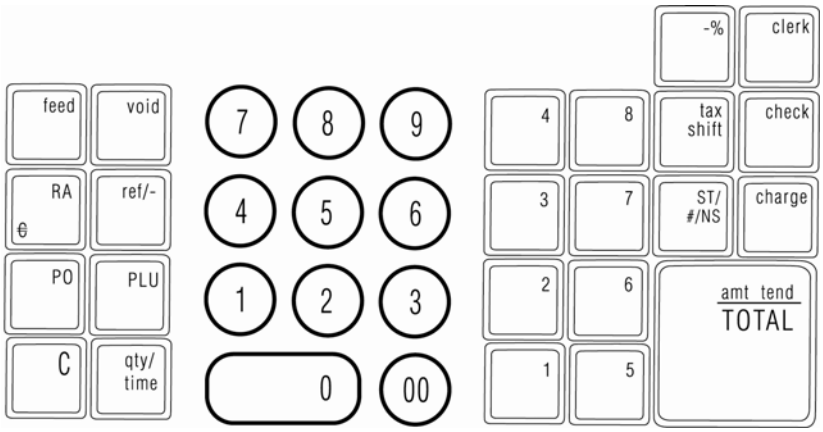
IMPORTANT - Please read this section carefully before attempting to operate the cash register or set the programs.

1. Place on a level surface to permit smooth operation of the cash register.
2. Plug in the electrical connection to an appropriate outlet.
3. Install batteries. (See Page 9) Do not install batteries unless the register is plugged in.
4. Install paper. (See Page 10)
5. Set desired program options using Quick Start (Page 12).
6. Set the Control Switch to R1 (journal record) or R2 (customer receipts).
7. The machine is ready for cash register transactions.

MAINTAINING THE CASH REGISTER

- Never cover the cash register when turned on. Doing so will prevent proper cooling of the electronic components.
- Cover the register when not in use to protect components from dust.
- Take care to keep all liquids away from the machine to avoid spills which could damage electronic components.
- To clean, use a soft, dry cloth. Do not apply organic solutions such as alcohol.
- Your cash register should be kept in areas free from dust, dampness or extreme hot or cold temperatures.
- If stored in extreme temperatures (below 32 degrees or above 104 degrees Fahrenheit), allow the temperature inside the register to reach room temperature before turning on.
- DO NOT attempt to pull the paper tape when printing or installing paper. Always use the [Feed] key to advance the paper. Pulling the tape could damage the print mechanism.
- If electronic service is necessary, an authorized service center is recommended.
- Familiarize yourself with the safety statements on Page 2.

KEY PAD FUNCTIONS



1. **[Feed] - Paper Feed Key** - Advances the paper tape with no effect on register entries.

2. **[VOID] Void/Error Correction** - Used to correct an entry after it is printed or to void the previous entry.

3. **[Ref/-] - Dual Function: Coupon** - Subtracts the amount from an item or the sales total, such as a coupon deduction. **Refund** - Subtracts an item that is returned for refund. Minus key totals are shown in the management report.

4. **[RA/EURO] - Received on Account Key** - used to register any money received on account that is not part of a sale; i.e., the start-up money put in the drawer at the start of each business day can be registered as an RA. This key also functions as Euro key for Euro Dollar Conversion.

5. **[PO] - Paid Out** - Registers any money paid out or taken out of the cash drawer that is not part of a sale. Paid out totals appear in the management report.

6. **[PLU] - Price Look Up** - Registers the preset price of an individual item to the appropriate department.

KEY PAD FUNCTIONS

7. **[C] - Clear Entry and Stop Alarm Key** - Clears entries made on the keyboard prior to depressing the registration key. Also stops the error alarm when incorrect entries are made.

8. **[QTY/TIME] - Dual-Function: Multiply, Display Time** - Multiplies [DEPARTMENT], [PLU] or [Ref/-] key entries; also displays the current time, if set.

9. **Department Keys** - Used to select non-taxable and taxable sales at the pre-programmed tax rate.

10. **Numeric Entry Keys**

11. **Clerk Key - Used to identify associate transaction with a particular clerk. Supports up to 8 Clerks and an optional security code.**

12. **[-%] - Percent Discount Key** - Used to subtract a percentage rate from an individual item or an entire sale. The rate can be a pre-programmed percentage rate or any other manually entered percentage rate.

13. **[#/NS] - Non Add/No Sale Key** - Opens the cash drawer and prints reference data, like driver's license, telephone or social security numbers.

Comment:

14. **[TAX SHIFT] - Tax Shift Key** - Used to enter a non-tax item into a taxable department or to enter a tax item into a non-taxable department.

15. **[CHECK]** - Total sales paid by check. Check totals appear in the management report.

16. **[SUBTOTAL] - Subtotal Key** - Used to obtain a subtotal of all entries with tax added.

17. **[CHARGE] - Charge Key** - Used to total sales that are charged.

18. **[Amt Tend/TOTAL] - Amount Tendered and Cash Total Key** - Used to total transactions, compute change and obtain daily grand totals of all transactions in "X" and "Z" positions.

THE CONTROL SWITCH

The Control Switch (under the Journal Compartment) must be properly positioned to operate the cash register or set the programs. The Control Switch is also used to print or reset the totals for the management report.

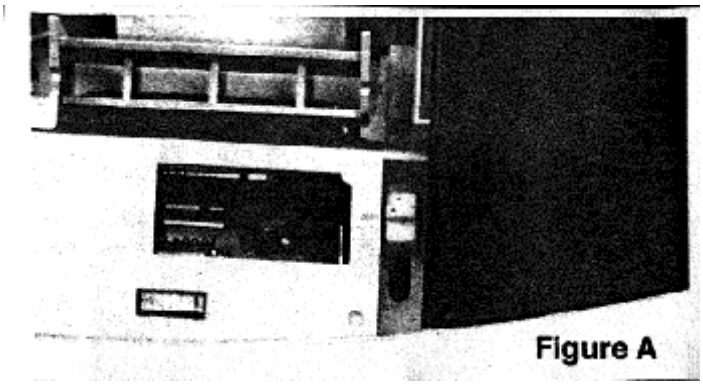


Figure A

Depending on the desired operation, position the Control Switch as follows:

"OFF" - The cash register is turned off and inoperable.

"R1" (On/Journal Tape) - The cash register is set for standard operations, including preset options. A journal record is printed for each transaction.

"R2" (On/Customer Receipt) - The cash register is set for standard operations, including preset options. A customer receipt prints for each transaction.

"X" (Management Report) - Prints the "X" management report.

"Z" (Prints Management Reports and Resets Totals) - Prints the "Z" management report and resets totals (except "locked in" grand total) to zero.

"PRG" (Program Mode) - Used to set and change program settings.

REMOVABLE CASH DRAWER WITH LOCK

The cash drawer will open after completing a cash, check or charge transaction by pressing the [#/NS] key, or by the hidden emergency lever underneath the register.

The cash drawer is electronically locked when the control switch is in the "OFF" position. In addition, the cash drawer is designed with a security lock with key that manually locks the cash drawer and prevents electronically opening it by the [#/NS] key or by the hidden emergency lever underneath the register.

The cash drawer can be completely removed from the register by lifting up on the open drawer and pulling toward you.

READING THE DISPLAY

The display shows entry amounts and related transaction information through use of numbers and special symbols. Display windows are situated so that operator can view the operations.

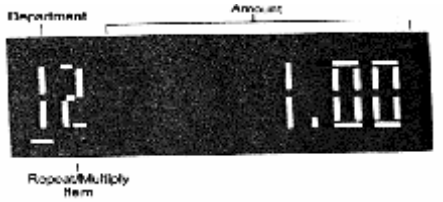
The display is read from left to right as follows.

Department - The first digit displays the department key pressed for each entry.

Repeat/Multiply - The second digit displays when repeating or multiplying items to indicate the number of items entered at one price.

Amount - The remainder of the display shows the entry amount. Up to 7 digits can be used for the amount of each entry.

For example, if you register a $1.00 item to Department 1 and repeated the entry, the display would show:



Special Symbol Indicators

Special symbols appear at the far left of the display during operation of the cash register. These symbols identify the amount shown, warning of an error condition or indicate use of the program mode. They include:

(Change) - Indicates the displayed amount is change due to the customer.

(Minus) - Displays for a negative entry. Also displays if subtotal or cash tendered total is a negative number due to a return or refund.

(Subtotal) - Indicates amount shown is a subtotal, including tax if applicable.

(Total) - Indicates amount shown is the total of the transaction.

(Error) - Displays if an error is made during operation or when setting programs. An error tone sound to alert the operator.

SEC Code - Displays when a security code has been programmed and an entry is attempted in either the Program (PRG) or Z modes.

These symbols clear automatically when you start the next entry or press the **[C]** Clear key.

DISPLAYING THE TIME

Simply press the **[QTY TIME]** key to display the current time. (See **THE REGISTER PROGRAMS** to set the time). The time can be displayed in either a 12 or 24 hour format. (See Page 15). The displayed time is automatically cleared once a transaction is started.

NOTE: Trying to use this feature during a transaction will result in an error tone. If this occurs, press **[C]** to clear the error.

ERROR CONDITIONS

THE ERROR ALARM SYSTEM

The error alarm system warns of an operator error (usually pressing the wrong key for a specific type of entry) or an error when setting a program option. When the error tone sounds, an "E" appears in the display and the keypad locks. An error tone will be played if a cash register function is not programmed.

To clear the "E" error, simply press the [C] Clear key.

NOTE: Moving the Control Switch from "R1" or "R2" to another position before completing a transaction will result in an error condition to remind you to total the transaction.

Clearing an Error:

1. Press the **[C]** Clear key. The tone ends, the display clears and the keypad unlocks.
2. Determine what error was made.
3. Continue with the transaction or restart the program.

NOTE: The **[C]** Clear key also clears an incorrect entry from the display prior to pressing a registration key. Once an entry is printed, the **[VOID]** key must be used to correct an error.

VOIDING ERRORS

Once an entry is printed on the tape, the **[C]** Clear key cannot be correctly used. Use the **[VOID]** key to correct an error just registered.

1. Voiding the Entry Just Completed:

If the transaction has not yet been completed, to erase the entry, simply press the [VOID] key. The entry is reprinted with a "VD" symbol following the amount and erased from the transaction.

2. Voiding an Earlier Entry:

To void an earlier entry:

1. Complete and total the transaction, including the error.
2. Press the [VOID] key.
3. Retype the incorrect information, exactly as originally entered.
4. Total the transaction.

THE BACK-UP BATTERY SYSTEM

During cash register operations, all transaction data for the management report is stored in the register's memory. The memory also holds all the optional program information. The memory back-up system keeps this information stored in memory when the cash register is turned off.

The memory is protected by 4 standard "AA"(1.5-Volt) batteries that must be installed before programming the register. Batteries are not included with the 110cx register. These must be purchased separately.

When properly installed, these batteries provide back-up power to the register memory if the power cord is accidentally disconnected or if a power interruption occurs. The daily transactions and locked in grand total will be retained by the machine without (AC) power because of the memory protection feature. Average battery life protection is approximately 30 days after power interruption.

TO INSTALL OR REPLACE BATTERIES:

1. Open the printer cover as described on Page 10 and move the control switch to the "R1 or "R2" position.

2. Remove the battery cover, located at the back of the printer mechanism. (Figure B).

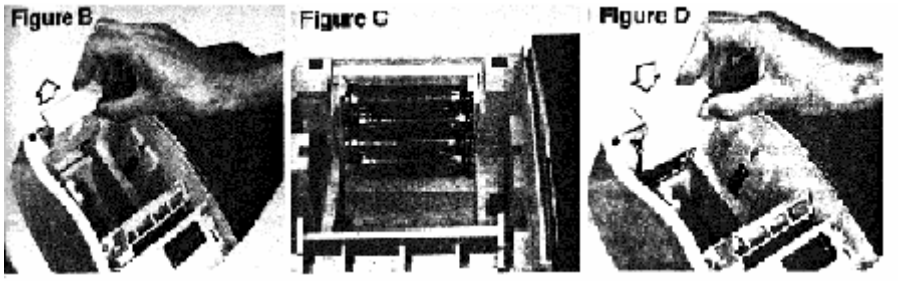
3. Position the batteries as indicated (Figure C) making sure that the positive and negative poles are aligned correctly.

4. Replace the battery cover by sliding down in position. (See Figure D).

5. Close the printer cover.

NOTE: It is important that the unit is plugged in before the batteries are installed.

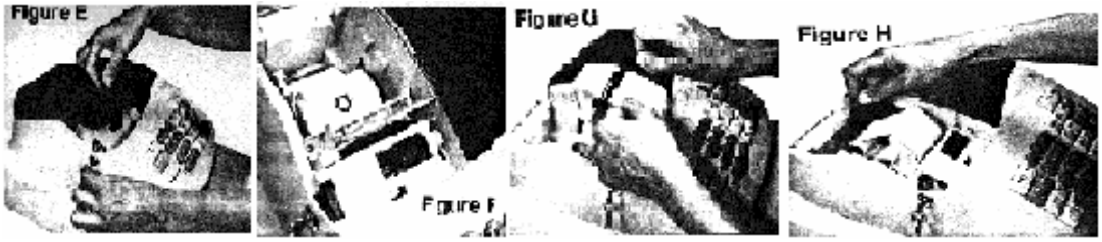
NOTE: In order to assure continuous battery back-up protection, it is important that the batteries be changed at least once every year.



LOADING PAPER

HOW TO LOAD THE PAPER

This register uses standard 2 1/4" single ply calculator paper to produce either a customer receipt (outside) or a journal record (inside).



NOTE: It is recommended to use ROYAL brand 2 1/4" (57mm) "bond quality" paper which will help prevent dust deposits on the printer mechanism caused by inexpensive paper rolls. Replace with standard bond quality calculator paper. **ROYAL Order #013129**.

1. Plug in your cash register.
2. Grasp the printer cover and pull gently up. Remove the printer cover and set aside. (Figure E)
3. Cut or tear the end of the paper roll evenly for a straight edge to permit proper feeding through the printhead.
4. Place the paper roll in the paper holder so that the paper will feed out from the bottom of the roll.
5. Insert the end of a single paper tape into the paper slot. (Figure F). Adjust writing table as needed to insert the paper.
6. Depress the paper feed [Feed] key until the paper catches and advances through the printer.
7. If the paper does not feed through the printer, make sure the paper was entered properly.
8. Pass the tape through the receipt window of the printer cover.

or

If a journal record is desired, insert the tape into the journal winder. Simply advance the tape approximately 10-12 inches by using the paper feed [Feed] key. Then, slide the tape under the two forks that extend on both sides of the journal winder. (See Figure H). Turn the spindle manually a few times to take up the excess paper. Then advance the paper using the Feed key until the journal paper winds securely around the spindle. (Figure H]

9.Replace the spindle and close the printer cover.

INSTALLING INK ROLL

HOW TO CHANGE THE INK ROLL

This register comes equipped with the ink roll installed. The ink roll releases special ink to the printhead which produces printout on the paper. After a period of time, depending upon the amount of use, the ink in the roll will be used up. When printout becomes faint, the ink roll needs to be replaced.

CAUTION:

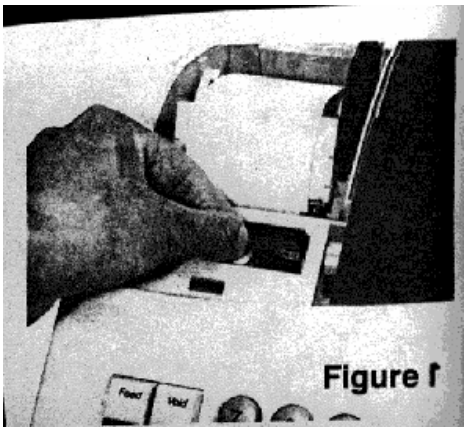
The ink roll is NOT designed to be re-inked. Under no circumstances should this be done or permanent damage to your cash register printhead will result. Such damage WILL NOT be covered under Royal's warranty.

REPLACE YOUR INK ROLL FOLLOWING THE INSTRUCTIONS BELOW:

1.Turn the control key to the "open" position and open the printer compartment.

2. The ink roll is found in front of the printhead mounted in a plastic cartridge. To remove, grasp the small clip on the left of the ink roll and pull up. The ink roll will easily pull away from the printhead. (Figure I)

3. To replace a new ink roll, insert the ink roll according to markings "L" (Left) and "R" (Right) by pressing downward to lock it into position, then close the printer cover. No tools are necessary. For best performance, store unopened ink roll package in a cool, dry place until installed.



NOTE: Replace with ROYAL Ink Roll, **Order #013109**.

QUICK START

Quick Start is a brief but complete start-up program that allows you to "get started" immediately on the most basic aspects of operating your new cash register. Follow these directions precisely:

1. **Read and follow the machine ORIENTATION and set-up instructions on pages 1-11. Reminder: It is important that the register is plugged in before the back-up batteries are installed.**

2. Perform the following Quick Start programming procedures:

   A. Open the printer compartment and place the control switch at the PRG (Program) position.

   B. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been programmed, continue with step C.

   C. Set the current date by typing the numeric keys to represent the **month/day/year**. Single digits must be preceded by a zero. For example, to set June 8, 1998, type **[060898]**. Finalize by pressing the **[ST/#/NS]** key.

   D. Set the current time using the 24-hour clock format. For example: to set 9:15 A.M., type **[0915]**; to set 7:15 P.M., type **[1915]**. Finalize this entry by pressing the **[QTY/TIME]** key.

   E. Set the decimal point as follows (U.S. standard): Type **[1]**, **[2]** and press the **[RA]** key.

   F. To set a fixed Tax Rate: Type **[1]** for tax rate #1, then press the **[Tax Shift]** key. Then type the tax rate as a 4-digit number. For example, if your tax rate is 8%, type **[8000]**; if your tax rate is 7.5%, type **[7500]**. Then press the **[Amt/Tend/TOTAL]** key.

   Please note for the next steps you will use the Department Keys which are the keys (Dept Shift, 1-8) located directly to the right of the numeric keys.

   G. In these examples, we will program the register to accept a zero price; press **[8]**, **[1]** and then press the **[RA]** key.

   H. Program Department 1 as taxable items. To do this, type the numeric keys **[0][0][1]**, press **[CHECK]**, type **[1][0][0]** and finalize by pressing the **[Department 1]** key. Repeat this procedure for all departments you wish to tax. Optional: If you wish to enter preset department prices, see page 18 for details.

   I. Program Department 2 as non-taxable items. To do this, type the numeric keys **[0][0][0]**, press **[CHECK]**, type **[1][0][0]** and finalize by pressing the **[Department 2]** key. Repeat this procedure to all the departments you wish not to tax. Optional: If you wish to enter preset department prices, see page 18 for details.

   J. Basic programming is now complete.

3. To ring up sales, slide the control switch to the R1 or R2 position (R1 winds a Journal Record on the spindle, whereas R2 gives you Customer Receipts through the window opening, as described fully on page 10). Follow the instructions given in "Transaction Examples".

4. To print Management Reports, slide the control switch to the X or Z position as needed, then press the **[Amt Tend/TOTAL]** key. Refer to explanation on page 37 - 41.

Once you have mastered the Quick Start operations, you may want to take advantage of other valuable register functions such as Percent Discount Rate on page 17, Price Look-Ups (PLUs) on page 23 and Security Code on page 25. If you have questions regarding Quick Start or any other aspects of the machine operation, call the Office Zone Service Dept. Hotline at 1-800-543-5454 ext. 129, Monday through Friday, 8:00 A.M. to 5:00 P.M. MT.

HELPFUL HINTS FOR A SUCCESSFUL START-UP

With reference to specific steps in "Quick Start":

2-F Tax Programming - As an alternative to using your state's fixed rate percentage you may now or later want to use the actual state tax codes in Appendix 2. The procedure outlined on page 22 can be used in place of Step 2F of the Quick Start.

Note: For the most current state tax tables, please visit **www.royal.com**, the cash register section. A current copy of state tax tables can be downloaded from this site.

GENERAL INFORMATION

- It is not necessary to re-program the entire machine to make a single program change or correction. If you wish to make a change, such as an update on state tax rate, be sure you are in the program mode, then re-do the program in question. A new program entry will automatically override a previous entry.

- Remember; you enter the program mode by moving the Control Switch to the PRG position.

- Be sure to slide the control switch to the "Off" position at the end of a business day.

- In order to assure continuous battery back-up protection, it is important that the batteries be changed at least once every year.

SETTING PROGRAMS

This cash register allows you to set programs customized to your individual business requirements. These programs include:

- Setting the Time and Date
- Setting the Clerk System
- Setting a Percent Discount (-%) Rate
- Assigning a Department Tax Status and Pre-set Department prices
- Setting a Tax Rate
- Creating Price Look-Ups
- Assigning a Security Code for the Program and "Z" Management Report Modes

Set some or all of the programs, depending on your business needs. Once selected, these programs reside in the register's memory until you change them.

NOTE: Be sure the memory back-up batteries are installed before setting these programs.

SETTING PROGRAMS

All programs are set by first entering the program mode. They are entered using the numeric keypad [0-9] and appropriate operation keys. Program selections appear in the display to verify entry and are printed on the receipt.

In this section you will find simple step-by-step procedures for each program. Following each procedure is an example. We suggest you complete the examples to become familiar with the program, then reset the programs according to your own requirements.

Entering the Program Mode:

1. To access the Control Switch, unlock and open the printer cover.

2. Set the Control Switch to the "PRG" position.

   NOTE: If a security code has been assigned, enter the security code and press the **[CHARGE]** key now.

3. Once in the program mode, you can set some or all of the programs.

Exiting the Program Mode:

After all the desired programs are set, simply move the Control Switch to the "R1" or "R2" position to begin operations or turn to the "Off" position if you are finished.

Clearing Errors:

If an error tone sounds, press the **[C]** key to clear the display. Reenter the program step.

If the prompt "SEC Code" appears, this means a security code was programmed. Enter the 4-digit code followed by the [CHARGE] key. Then proceed with programming.

Note: While you are programming your register, you might shift to R1 or R2 mode to test a feature by running a transaction. If you do not [TOTAL] the transaction, when you return to PRG mode an error tone will sound. Simply return to R1/R2 and [TOTAL] the transaction and then return to PRG mode.

SETTING THE DATE AND TIME

Set the date option to print the current date at the top of each receipt, journal record or management report. The current time can also be displayed by pressing the **[QTY/TIME]** key.

Set the time option to print the current time at the bottom of the receipt. The time will automatically print and display in the 12 hour format. The time prints in the following format: HH•MM. For example: 9:30. If the time is PM, the receipt will print .9-30.

The date and time change automatically as long as the back-up batteries are installed.

Setting the Date:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[the numbers]** representing the current date. Use the following format: MMDDYY. NOTE: Single digit numbers for months and days must be preceded by a zero [0].
3. Press the **[#/NS]** key to store the date.
4. Continue with the next program or move the Control Switch out of the Program mode.

Example: Set a date of March 7, 1998

Type/Press:	The Display Shows:	The Receipt Shows:
030798 + [#/NS]	307.98	03·07·98

Date Format: The date will automatically print in the following format: MM-DD-YY (Month-Day-Year). For example: 03·07·98.

To select the Day-Month-Year format:

1. Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[7] [1]** and press **[RA]**.
3. Continue with the next program or move the Control Switch out of the Program position.

To change back to the Month-Day-Year setting, at Step 2, type **[7] [0]** and press **[RA]**.

Setting the Time:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2).
2. Type **[the current time]** using the following format: HHMM.
3. Press the **[QTY TIME]** key to store the time.
4. Continue with the next program or move the Control Switch out of the Program mode.

Example: Set the time at 3:30 PM: (with 12 hour format)

Type/Press:	The Display Shows:	The Receipt Shows:
1530 + [QTY TIME]	15·30	15-30

SETTING THE CLERK SYSTEM

The Clerk System allows transactions to be associated with a clerk #. Optionally, there can be a security code assigned to each clerk # and the register supports up to 4 Clerks. The benefit of the system is that sales can be tracked by clerk; a Clerk report captures the number of transactions and sales.

There are a few steps to set up the Clerk System.

- Activate/Disable the Clerk System
- Assign Clerk # with or without a security code entry reguired
- Assign the security code to a Clerk #

Activate/Disable the Clerk System:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[44444]**
3. Enter either **[0]** or **[1]** [0] disables the Clerk System; [1] activates the Clerk System.
4. Press the **[Amt/Tend/TOTAL]** key to finish.

Assign Clerk # and Security Code Entry:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[11]**
3. Enter either **[0]** or **[1]** [0] Clerk # only; [1] Clerk # and security code.
4. Press the **[Amt/Tend/TOTAL]** key to finish.

To Assign a Security Code to Clerk #:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
1. Type **[444444]**
2. Press the **[Amt/Tend/TOTAL]** key
3. Enter the **Clerk** # (1 - 4)
4. Enter the (security code) 3 digits. Examples: 123 222, 212 ...
5. Press the **[Clerk]** Repeat steps 3, 4 and 5 for each Clerk # you want to have a security code.
6. Press the **[C]** key to finish.

Printing the Clerk Report:

To print a report of sales by clerk, once the system is activated and Clerk #s assigned, in x mode, press the **[Clerk]** key.

Using the Clerk Feature

Before entering a transaction, press the number on the numeric pad followed by the [Clerk)key to record transactions to that Clerk number.

PERCENT DISCOUNT (-%)

Setting this option automatically calculates the preset rate each time the [-%] key is pressed. This percentage rate can be discounted from an individual item or an entire transaction.

You can override the program rate by manually entering a different rate. (See **TRANSACTION EXAMPLES FOR OPERATING THE CASH REGISTER**).

Setting a Percent Discount (-%) Rate:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.

2. Type **[the numbers]** representing the desired percentage rate.

   NOTE: Up to four digits, 0-99.99, can be used. For example: to enter 10%, type 1000; to enter 6.5%, type 650.

3. Press the **[-%]** key to store the rate.

4. Continue with the next program or move the Control Switch out of the Program mode.

Example: Set a percent discount rate of 5%:

Type/Press:	The Display Shows:	The Receipt Shows:
500	5·00	
[-%]	5·00	5·00 %-

To set a percent discount rate of 10%: press [1000] and then press the [-%] key.

DEPARTMENT TAX STATUS

A total of 16 departments are available on your cash register. Each department can represent a category of merchandise. For example, Department 1 can represent sales of beverages, Department 2; sandwiches, Department 3; candy, etc. Each department can be programmed as taxable or non-taxable. If desired, each department can also be programmed with a preset price.

The programming of the departments consists of 3 steps; selecting the Multiple/Single Item Sale, Tax Status and Department Preset Price.

1. **Tax Status** - allows you to tax or not to tax a department key.
2. **Multiple/Single Item Sales** - Multiple Item Sale (Standard) allows many items to be rung up within a transaction. Single Item Sale allows only one item to be rung up in a transaction.
3. **Department Preset Price** (Optional) - allows you to program a price in a department key to save time when ringing up a sales entry. The price will automatically ring up each time the appropriate department key is pressed.

Note: You can have up to 4 Tax Rates. These are set in the section - Tax Rate. Use the chart below to determine how you want a department to calculate taxes. Keep in mind, for the sake of simplicity, you can set just 1 fixed rate and use that for all departments.

Tax Rate Chart

S2 Code		USA	CANADIAN	VAT
00	Non-Taxable	☐	☐	☐
01	Taxable by TAX 1	☐	☐	☐
02	Taxable by TAX 2	☐	☐	☐
03	Taxable by TAX 3	☐	☐	☐
04	Taxable by TAX 4	☐	☐	☐
05	Taxable by TAX 1 and TAX 2	☐	☐	
06	Taxable by TAX 1 and TAX 3	☐	☐	
07	Taxable by TAX 1 and TAX 4	☐	☐	
08	Taxable by TAX 2 and TAX 3	☐	☐	
09	Taxable by TAX 2 and TAX 4	☐	☐	
10	Taxable by TAX 3 and TAX 4	☐	☐	
11	Taxable by TAX 1, TAX 2 and TAX 3	☐	☐	
12	Taxable by TAX 1, TAX 2 and TAX 4	☐	☐	
13	Taxable by TAX 1, TAX 3 and TAX 4	☐	☐	
14	Taxable by TAX 2, TAX 3 and TAX 4	☐	☐	
15	Taxable by TAX 1, TAX 2, TAX 3 and TAX 4	☐	☐	

ZERO PRICE ENTRY SETTING

This procedure allows a "0" price to be entered for a department or PLU price. The default setting does not accept a "0" price.

1. Enter the **Program** mode: Move the Control Switch to the "PRG" position.
2. To allow zero price entry, type **[8]**, then **[1]**, followed by the **[RA]** key.
3. To prohibit zero price entry, type **[8]**, then **[0]**, followed by the **[RA]** key. **Please note this is the default setting**.

TO PROGRAM DEPARTMENTS AS TAXABLE

Example: Program Department 1 as taxable, using Tax Rate 1, multiple entry and pre-set price of 1.99:

1. Enter the program mode. Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.
2. Type **[0]** or **[1]** 0 = Multiple Sales ; 01 = single item
3. Type (S2 Code) **[2-digit #]** from the Tax Rate Chart above.
4. Press the **[CHECK]** key.
5. Type **[Pre-set Price]**. If you do not wish to program a department pre-set price, enter "0".
6. Press the **[DEPARTMENT]** key.

Repeat these steps for each department you will be using.

Example: [0] + [01] + [Check] + [199] + [Department 1]

TO PROGRAM DEPARTMENTS AS NON-TAXABLE

Example: Program Department 2 as non-taxable, multiple entry and no pre-set price:

1. Enter the program mode. Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.
2. Type **[0]** for Multiple Item Sale, then type **[00]** for no tax. Press the **[CHECK]** key.
3. Press **[0]** for no pre-set price, then press the **[DEPARTMENT 2]** key.

Example: [0] + [00] + [Check] + [0] + [Department 2]

TAX RATE

Programming the Tax Rate

The 110cx supports up to 4 Tax Tables; therefore, it allows 4 separate rates to be established and each of those rates can be linked to a department. For instance, Tax1 could be 6%, Tax2 could be 8%, Tax3 could be 5.5% and Tax4 could be 2%. By establishing separate tax rates, a separate Tax rate total is printed on the management report, if you want to know taxes paid by rate.

Each tax rate can be programmed as either a **fixed percent tax rate** or **tax table rate**. The fixed rate is a fixed percentage charged on the total item. For example, 5%. A tax table rate is based on an approved chart issued by individual states.

NOTE: Individual state tax tables are available to be downloaded at www.royal.com as part of the Cash Register section.

The tax system can be set for one of the following settings:

0 = USA Tax Mode (standard setting for U.S. tax)
1 = Canadian Tax Mode
2 = VAT Tax Mode (commonly used in European Countries)

The cash register has already been set at the factory for the USA Tax Mode. If you need to change to the Canadian Tax System or to the VAT Tax System, following the instructions in those sections.

See the next page for programming details.

TO PROGRAM A FIXED TAX RATE: (Recommended For Most Applications)

"PRG" + Tax 1 - 4 + [Tax Shift] + Tax Rate (4 Digit #) + (Amt/Tend/TOTAL)

Note: You can program up to 4 Tax Rates or just 1. The following steps allow you to set up 1 or up to 4. Remember, when you determine a department's tax status, at that point, you identify the tax rate you want for that department.

If you make a mistake between steps 2 and 4, press the Clear **[C]** key and start again at step 2.

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Enter **(1 - 4)** , 1 through 4 being the Tax Rate identifier.
3. Press **[Tax shift]** key
4. Enter the **Tax Rate**. Up to 5 digits can be used. You MUST enter three digits after the desired decimal place. For example, to enter 5.5%, type **[5500]**; to enter 7%, type **[7000]**; to enter 10%, type **[10000]**.

Note: If you want to set up another Tax Rate, return to step 2. When you are finished setting Tax Rates, go to step 5 to complete the procedure.

5. Press the **[Amt Tend/TOTAL]** key.

Continue with other programming or move the Control Switch out of the Program mode.

Example: Set a tax rate of 5.5%:
1. If needed, move the Control Switch to the Program mode (PRG).
2. Enter [5500] + the [Amt Tend/TOTAL] key.

TAX TABLE (AN ALTERNATIVE FOR USING THE FIXED PERCENTAGE TAX RATE)

If you wish to assign a state tax table rate (instead of a fixed percentage), a series of codes must be used. These codes are derived from an approved state tax table chart. If your state's tax rate is not listed in Appendix I, refer to Appendix II for instructions on calculating your own state's tax table code.

TO PROGRAM A SINGLE TAX TABLE RATE

"PRG" + (State Tax Table Code) + (Tax Shift)

Repeat as needed for each code

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the [CHARGE] key now. If not, continue with Step #2.
2. **Type each tax table code** followed by the **[TAX SHIFT]** key.

Example: The tax code for Arizona 4% is: 121-240096-13-19-23-27-27-1029-25-25-25-1025.

1. **Move the Control Switch to the "PRG" position.**
2. **Enter [121] + the [TAX SHIFT] key.**
3. **Enter [240096] + the [TAX SHIFT] key.**
4. **Enter [13] + the [TAX SHIFT] key.**
5. **Enter [19] + the [TAX SHIFT] key.**
6. **Continue entering the tax codes and press the [TAX SHIFT] key after each code until finished.**

3. Continue with other programming or move the Control Switch out of the Program position.

PRICE LOOK UP (PLU)

A total of 99 Price Look Up codes (PLUs) are available on this cash register. The Price Look Up system allows for fast, accurate entry of an item and automatically records the number of items sold. There are 2 methods in programming PLUs. One method is to set the PLU number with a preset price known as a Fixed PLU Price. The second method is to set the PLU without a preset price, where you are able to manually enter the price of an item while still having the sales activity recorded under the PLU number on management reports, known as an Open PLU Price (sub-department). The Open PLU Price is recommended for items whose prices change frequently.

Before getting started with programming PLUs, the following 3 steps should be done:

1. Make a list of the PLU numbers and their prices you wish to program.
2. Decide whether you want the PLU number designated as a Fixed PLU Price or an Open PLU Price. **Note: The Fixed PLU Price does not allow you to override or change a preset price in the register mode, whereas the Open PLU Price does.**
3. Determine if each PLU number requires tax or no tax. If tax is required for a particular PLU number, be sure to link the PLU number to a department that is programmed for tax. Likewise, if a PLU number does not require tax, then link the PLU number to a department not programmed for tax.

Program PLU Status

Note: This procedure should only be done if you are interested in the Open PLU Price (sub-department) option. Otherwise, proceed to the next section on Programming PLU Prices.

1. Enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.
2. Press the **[PO]** key to begin programming the PLU Status.
3. Type the **[PLU # (between 01-99)]**, press the **[PLU]** key, type the **[PLU Status #]** and press the **[Department]** key.

   PLU Status **0** = Fixed PLU Price (This is the factory default option).
   PLU Status **1** = Open PLU Price (Sub-department option).

4. Repeat Step #3 for all desired PLU numbers.
5. Press the **[PO]** key to finish programming the PLU Status.
6. Continue to the next section on programming the PLU Price.

Program PLU Prices

1. Enter the Program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.
2. Press the **[QTY/TIME]** key to begin programming.
3. Type the **[PLU Number (between 01-99)]**, press the **[PLU]** key, type the **[PLU Price]** and press the **[Department]** key.
4. Repeat Step #3 for all desired PLU numbers. **Note: When programming PLU numbers consecutively, it is not necessary to type the PLU number each time. The system automatically prompts you with the next PLU number**.
5. Press the **[QTY/TIME]** key to finish programming PLU prices.

CONFIRMATION REPORTS: No printing will occur during programming of PLUs. To print a PLU Confirmation Report, turn to the next page.

PLU CONFIRMATION REPORT

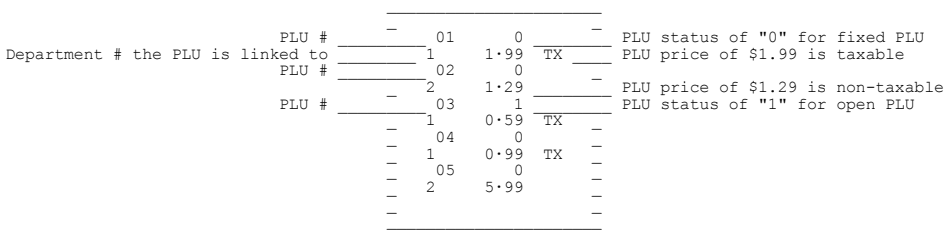
To print a PLU Confirmation Report

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.

2. Press the **[PLU]** key. The PLUs programmed will print. See sample printout below.

3. Continue with other programming or move the Control Switch out of the "PRG" position.

PLU Confirmation Report


PLU # 01 0
Department # the PLU is linked to 1 1·99 TX
PLU # 02 0
2 1·29
PLU # 03 1
1 0·59 TX
04 0
1 0·99 TX
05 0
2 5·99
PLU status of "0" for fixed PLU
PLU price of $1.99 is taxable
PLU price of $1.29 is non-taxable
PLU status of "1" for open PLU

SETTING THE SECURITY CODE AND DECIMAL POINT

SECURITY CODE: For Program and Management Report Protection

Management Reports can be printed in either the "X" or "Z" positions on the Control Switch. When printed in the "Z" position, transaction totals are reset to zero. Assigning a security code can prevent accidental reset of transaction totals. Once assigned, the "Z" report prints ONLY after entering the security code.

NOTE: Assign a number easily remembered. You should also keep the program receipt as a reminder. If you do forget the code, reset this program with a new code. Then, print the report using the new code.

Assigning a Security Code:

1. If necessary, enter the program mode. (Move the Control Switch to the "PRG" position).
2. **Type (the numbers) representing the security code. (Up to four digits can be used).**
3. Press the **[CHARGE]** key to store the code.

Example: Assign a security code of "7748":

Type/Press:	The Display Shows:	The Receipt Shows:
7748 + [CHARGE]	77.48	77.48 CH

NOTE: IF YOU SET A SECURITY CODE, YOU WILL NOT BE ABLE TO ALTER YOUR PROGRAM OR PRINT YOUR MANAGEMENT REPORTS UNTIL YOUR SECURITY CODE HAS BEEN ENTERED. THE PROMPT "SEC CODE" WILL APPEAR IN THE DISPLAY TO REMIND YOU TO ENTER THE CODE. TO DELETE A SECURITY CODE NUMBER: ENTER THE PROGRAM MODE, TYPE [0] [0] [0] [0] AND PRESS THE [CHARGE] KEY.

Using a Security Code in the Program Mode:

1. In the "PRG" mode, enter the 4-digit code and press the **[CHARGE]** key. Proceed with programming.

Using a Security Code in the "Z" Mode:

1. To print a "Z" report when a security code has been assigned, in the "Z" mode, enter the 4-digit code and press the **[Amt Tend/TOTAL]** key.
2. The "Z" report will print.

SETTING THE DECIMAL POINT

To set 2 decimal place (standard in the U.S.):

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.
2. Type the numbers **[1]**, **[2]**, followed by the **[RA]** key.
3. If finished with programming, move the Control Switch out of the "PRG" position.

THE SAME PROCEDURES APPLY FOR OTHER DECIMAL SETTINGS AS FOLLOWS:

[1] + [0] + [RA] = 0.
[1] + [1] + [RA] = 0.0
[1] + [2] + [RA] = 0.00 Standard setting for U.S.
[1] + [3] + [RA] = 0.000

SETTING THE EURO CONVERSION FEATURE

CONVERSION FEATURE: Useful along Border States for currency conversion

The Euro Conversion feature provides a automatic method of currency conversion. It establishes one currency as the Local currency and another currency as the converted currency. Once the rate is established, it will remain the rate unless changed. This feature does not use a daily exchange rate but is established through the following programming steps. The rate can be changed as frequently as one would want to change the rate, either daily, weekly, monthly or annually.

There are a few steps to set up the Euro Conversion feature.

- Activate/Disable the System
- Print the Currencies to be printed
- Establish the Local/Euro Currency as Standard
- Setting the Conversion Rates

Activate/Disable the Euro Conversion Feature:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[7]**
3. Enter either **[0]** or **[1]** [0] disables the feature; [1] activates the feature.
4. Press the **[RA/Euro]** key to finish.

Print the Currencies to Be Printed:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[9]**
3. Enter either **[0]** or **[1]** [0] print both currencies; [1] print only tendered currency.
4. Press the **[RA/Euro]** key to finish.

Establish the Local/Euro Currency as Standard:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[10]**
3. Enter either **[0]** or **[1]** [0] = Local; [1] Euro.
4. Press the **[RA/Euro]** key to finish.

Setting the Conversion Rates:

2. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
3. Type **[0 - 8]** 0-8 is the number of decimal places for the local currency
4. Type [0-8] 0-8 is the number of decimal places for the Euro currency
5. Type [0.00000001 - 999999] this is the rate of conversion. See example below.
6. Press the **[VOID]** key to finish.

In the above step you establish the rate of the local currency and the rate of the converted currency. For instance, for use along US/Canadian borders, the local currency is US dollars (USD) and the converted currency is Canadian dollars (CND); the conversion rate might be 1 USD = 1.5 CND. To program this example, enter:

1 (for USD) 2 (for CND) 000015 (for conversion rate) [VOID]

SUMMARY OF PROGRAMS

Listed below is a recap of all programs set according to the examples used in this section:

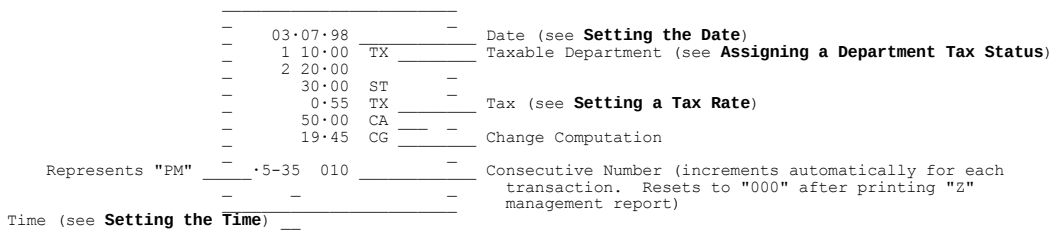
Program/Example	Type/Press	Sample Receipt
SET CONTROL SWITCH TO "PRG"		
SET DATE: MARCH 7, 1998	(030798) + [#/NS]	03·07·98
		15·30
SET TIME: 3:30 PM	(1530) + [QTY/TIME]	5·00 %-
		001 CK
SET -% RATE: 5%	(500) + [-%]	1 0·00 TX
		000
ASSIGN TAX STATUS:		2 0·00
DEPT 1 - TAXABLE	(0) + (01) + [CHECK] + (0) + [DEPARTMENT 1]	0·01 TX
DEPT 2 - NO TAX	(0) + (00) + [CHECK] + (0) + [DEPARTMENT 2]	55·00 TX
		77·48 CH
SET FIXED TAX: 5.5%	(5500) + [AMT TEND/TOTAL]	
ASSIGN A SECURITY CODE: 7748	(7748) + [CHARGE]	

TRANSACTION EXAMPLES

The examples in this section show how to complete different type of transactions. Sample receipts are included that reflect the program examples used in setting **THE REGISTER PROGRAMS**.

SAMPLE RECEIPT

The following sample shows where general transaction information is printed on a receipt and what program options must be set to print the appropriate options. (See **THE REGISTER PROGRAMS** for specific instructions).


03·07·98 Date (see Setting the Date)
1 10·00 TX Taxable Department (see Assigning a Department Tax Status)
2 20·00
30·00 ST
0·55 TX Tax (see Setting a Tax Rate)
50·00 CA
19·45 CG Change Computation
Represents "PM" ·5-35 010 Consecutive Number (increments automatically for each transaction. Resets to "000" after printing "Z" management report)
Time (see Setting the Time)

TRANSACTION SYMBOLS

The following symbols appear on the paper tape. They are printed to the right of entries to identify various totals and transaction operations. Some of these symbols also appear on the management report. They include:

CA - Cash Transaction Total
CH - Charge Transaction Total
CA - Amount Tendered
ST - Subtotal, Excluding Tax
CG - Change
% - Percent Discount Applied To An Item Or Sale
- - Coupon / Discount / Refund Or Void
X - Quantity Being Multiplied
@ - Item Price Being Multiplied
VD - Voided Previous Entry
RF - Refund Or Return (Management Report Only)
- Identification Number
NS - No Sale Receipt
CL - Clerk
TS - Tax shift

TRANSACTION EXAMPLES

STANDARD TRANSACTIONS

Registering a Single Item Sale and Tendering Change

NOTE: Up to 7 digits can be used for the amount of the entry.

Example: Register a $1.00 item in Department 1 (programmed at 5.5% fixed tax rate). Subtotal transaction and compute change for $5.00.

1. **[100] + [DEPARTMENT 1]**
2. **[SUBTOTAL]**
3. **[500] + [Amt Tend/TOTAL]**

```
1    1·00    TX
     1·00    ST
     0·06    TX
     5·00    AT
     3·94    CG
·5-35  010
```

Registering a Sale to Multiple Items

NOTE: Up to two digits can be used for the quantity multiplied.

Example: Multiply two items times $1.50 to Department 1.

1. **[2] + [QTY/TIME] + [150] + [DEPARTMENT 1]**
2. **[SUBTOTAL]**
3. **[Amt Tend/TOTAL]**

```
     2·      X
     1·50    @
1    3·00    TX
     3·00    ST
      ·17    TX
     3·17    CA
·5-36  011
```

Registering a Charge Transaction

NOTE: Charge transactions are counted and registered to the charge total in the financial report.

Example: Register a $2.50 item to Department 1 and a $3.00 item to Department 2 as a charge transaction.

1. **[250] + [DEPARTMENT 1]**
2. **[300] + [DEPARTMENT 2]**
3. **[CHARGE]**

```
03·07·98

1    2·50    TX
2    3·00
     0·14    TX
     5·64    CH
·5-37  012
```

TRANSACTION EXAMPLES

Using Split Tendering

Example: Register a $10.00 item and a $15.00 item to Department 2; split the total between $20.00 cash and $5.00 charge.

1. **[1000]** + **[DEPARTMENT 2]**
2. **[1500]** + **[DEPARTMENT 2]**
3. **[SUBTOTAL]**
4. **[2000]** + **[Amt Tend/TOTAL]** + **[CHARGE]**

```
2   10·00
2   15·00
    25·00     ST
    20·00     CA
     5·00     CH
·5-38  013
```

MINUS (-) KEY TRANSACTIONS

Registering a [-] Reduction:

NOTE: Up to 7 digits can be used for the amount of the reduction.

Example: Register a 10¢ reduction (coupon) on a $2.00 item to Department 2.

1. **[200]** + **[DEPARTMENT 2]**
2. **[10]** + **[Ref/-]**
3. **[Amt Tend/TOTAL]**

```
2    2·00
    -0·10
     1·90     CA
·5-39  014
```

TRANSACTION EXAMPLES

PERCENT DISCOUNT (-%) TRANSACTIONS

Discounting [-%] Individual Items

NOTE: Up to four digits can be used for the discount percentage (0-99.99%). You **MUST** enter two digits after the decimal position.

Example: Register a 10% discount to a transaction.

1.	**[100]** + **[DEPARTMENT 1]**	1 1·00 TX
		10·00 %
2.	**[1000]** + **[-%]**	-0·10 -
		·90 ST
3.	**[SUBTOTAL]**	0·05 TX
		0·95 CA
4.	**[Amt Tend/TOTAL]**	·5-40 016

Using a Preset Discount (-%) On The Total Sale:

Example: Register the preset percent discount (5%) to an entire transaction.

1.	**[100]** + **[DEPARTMENT 1]**	1 1·00 TX
		1 2·00 TX
2.	**[200]** + **[DEPARTMENT 1]**	3·00 ST
		5·00 %
3.	**[SUBTOTAL]**	-0·15 -
		0·16 TX
4.	**[-%]**	3·01 CA
		·5-41 017
5.	**[Amt Tend/TOTAL]**	

Using a Preset Discount (-%) on Individual Items:

Example: Register the preset percent discount (5%) on a $3.00 item to Department 2.

1.	**[300]** + **[DEPARTMENT 2]**	2 3·00
		5·00 %
2.	**[-%]**	-0·15 -
		2·85 CA
3.	**[Amt Tend/TOTAL]**	·5-42 019

Overriding the Preset Discount (-%]:

Example: Register a 15% discount (to override preset 5%] on a $10.00 item to Department 2. NOTE: You **MUST** enter two digits after the decimal position.

		·1·
1.	**[1000]** + **[DEPARTMENT 2]**	2 10·00
		15·00 %
2.	**[1500]** + **[-%]**	-1·50 -
		8·50 CA
3.	**[Amt Tend/TOTAL]**	·5-43 020

TRANSACTION EXAMPLES

PLU CODES

Note: PLU Codes must be preset to use this feature. See The Register Programs to assign PLU information.

Using a Fixed PLU Price:

Example: Register PLU #1 programmed at the preset price of $1.50:

1.	**[1]** + **[PLU]**	01 1·50 TX
		1·50 ST
2.	**[SUBTOTAL]**	0·08 TX
		1·58 CA
3.	**[Amt Tend/TOTAL]**	·5-30 036

Using an Open PLU Price (Sub-department):

Example: Register the price of $2.00 in PLU #3:

1.	**[3]** + **[PLU]**	03 2·00 TX
		2·00 ST
2.	**[200]** + **[PLU]**	0·10 TX
		2·10 CA
3.	**[SUBTOTAL]** + **[Amt Tend/TOTAL]**	·5-30 037

Using an Open PLU Price (Sub-department) with a Preset Price:

Example: Register PLU #3 programmed with the preset price of $10.00:

1.	**[3]** + **[PLU]**	
		03 10·00 TX
2.	**[PLU]**	10·00 ST
		0·50 TX
3.	**[SUBTOTAL]** + **[Amt Tend/TOTAL]**	10·50 CA
		·5-30 038

VOIDS AND REFUNDS

Voiding the Previous Entry in the Middle of a Sale:

Example: Void a $2.00 entry to Department 2 made in error. Then register a $3.00 item in Department 2.

1. **[200]** + **[DEPARTMENT 2]**
2. **[VOID]**
3. **[300]** + **[DEPARTMENT 2]**
4. **[Amt Tend/TOTAL]**

```
2    2·00TX
2   -2·00VD
2    3·00
     3·00CA
```

NOTE: To void an earlier entry or entire transaction, complete the transaction then follow the directions for a void.

Voiding a Single Item:

Example: Void a $1.00 item in Department 1.

1. **[VOID]**
2. **[100]** + **[DEPARTMENT 1]**
3. **[Amt Tend/TOTAL]**

```
1   -1·00VD
    -0·06TX
    -1·06CA
·5-45  023
```

Voiding Multiple Items:

Example: Void a $1.00 item in Department 1 and a $2.00 item in Department 2.

1. **[VOID]**
2. **[100]** + **[DEPARTMENT 1]**
3. **[VOID]**
4. **[200]** + **[DEPARTMENT 2]**
5. **[Amt Tend/TOTAL]**

```
1   -1·00VD
2   -2·00VD
    -0·05TX
    -3·05CA
·4-23  021
```

TRANSACTION EXAMPLES

REFUNDS

Refund a Single Item:

Example: Refund a $1.00 item in Department 1.

1. **[Ref/-]**
2. **(100)** + **[DEPT 1]**
3. **[Amt Tend/TOTAL]**

```
1    -1·00TX
     -0·05TX
     -1·05CA
·4-31  023
```

Refund Multiple Items:

Example: Refund a $1.00 item in Department 1 and a $2.00 item in Department 2.

1. **[Ref/-]**
2. **(100)** + **[DEPT 1]**
3. **[Ref/-]**
4. **(200)** + **[DEPT 2]**
5. **[Amt Tend/TOTAL]**

```
1    -1·00TX
2    -2·00
     -0·05TX
     -3·05CA
·4-31  024
```

Example: Refund 3 items at $1.00 in Department 1.

1. **[Ref/-]**
2. **(3)** + **[QTY/TIME]**
3. **(100)** + **[DEPT 1]**
4. **[Amt Tend/TOTAL]**

```
     3·X
     1·00@
1    -3·00TX
     -0·17TX
     -3·17CA
·3-45  015
```

TAX OVERRIDE TRANSACTIONS

Exempting Tax on an Item:

NOTE: Use this procedure to exempt an item from being taxed when registered to a taxable department.

Example: Exempt tax from a $2.00 item to Department 1 (preset at 5.5% fixed tax rate - 1).

1.	**[TAX SHIFT]** + **[200]** + **[DEPARTMENT 1]**	1 2·00
		1·00TX
2.	**[100]** + **[DEPARTMENT 1]**	0·06TX
		3·06CA
3.	**[Amt Tend/TOTAL]**	·5-45 024

Exempting Tax on an Entire Sale:

Example: Exempt tax on the entire sale registered to Department 1 (preset at 5.5% fixed tax rate).

1.	**[300]** + **[DEPARTMENT 1]**	
2.	**[500]** + **[DEPARTMENT 1]**	1 3·00TX
		1 5·00TX
3.	**[TAX SHIFT]**	8·00CA
		·5-45 025
4.	**[Amt Tend/TOTAL]**	

Adding Tax to a Non Taxed Department:

Example: Add the TX 1 preset rate (5.5% fixed tax rate) to a $1.00 item registered to Department 2 (preset as non taxable).

1.	**[TAX SHIFT]** + **[100]** + **[DEPARTMENT 2]**	2 1·00TX
		0·06TX
2.	**[Amt Tend/TOTAL]**	1·06CA
		·5-46 026

TRANSACTION EXAMPLES

OTHER TRANSACTIONS

Registering Money Received On Account:

Example: Register $10.00 received on account.

1. **[1000]** + **[RA]**

10·00RA
·5-46 027

Paying Money Out:

Example: Pay out $5.00.

1. **[500]** + **[PO]**

-5·00PO
·5-46 028

Registering an Identification Number:

NOTE: Up to 7 digits can be used for the identification number. This entry can be made prior to any operation. The # identification is not added to the management report or totals.

Example: Assign the ID number "12345" to a transaction.

1. **[12345]** + **[#/NS]**

12345 #

2. **[100]** + **[DEPARTMENT 1]**

1·00TX
0·06TX
1·06CA

3. **[Amt Tend/TOTAL]**

·5-47 029

Registering a No Sale:

NOTE: This operation simply prints a no sale receipt. An activity is registered to the activity counter in the management report.

1. [#/NS]

NS
·5-48 030

"X" AND "Z" SALES MANAGEMENT REPORTS

Transaction data is maintained in the memory of the cash register as long as the battery back-up system is in effect. This data can be printed as a report for management review.

The Management Report can be printed from either the "X" or the "Z" position on the Control Switch.

"X" POSITION REPORT (Refers to a mid-day reading)

The "X" position report prints the accumulated information and RETAINS ALL TOTALS IN MEMORY. Use this position to print periodic readings of transaction information. (Some users call the X-report a mid-day report).

"Z" POSITION REPORT (Refers to an end-of-day or close-out reading)

The "Z" position report prints the same information as the "X" report. However, once this report is printed, ALL TRANSACTION TOTALS ARE RESET TO ZERO except the grand total. (Some users call the Z-report an end-of-day report).

NOTE: To prevent accidental printing of the "Z" report, set the security code as explained in the SECURITY CODE section. Once this code is set, a "Z" report will not print until the security code is entered. If a "Z" report is attempted without entering the security code, the prompt "SEC Code" will appear in the display.

PRINTING THE SALES REPORT

IMPORTANT: Once a "Z" reading is taken, it cannot be duplicated, so be sure to have plenty of paper in the register.

1. Set the Control Switch to either the **"X"** or **"Z"** position.

2. Press the **[Amt Tend/TOTAL]** key.

NOTE: If a security code has been assigned, be sure to enter the security code before pressing the [Amt Tend/TOTAL] key.

TO CLEAR THE GRAND TOTAL:

1. Set the Control Switch to the **"PRG"** (Program Mode) position.

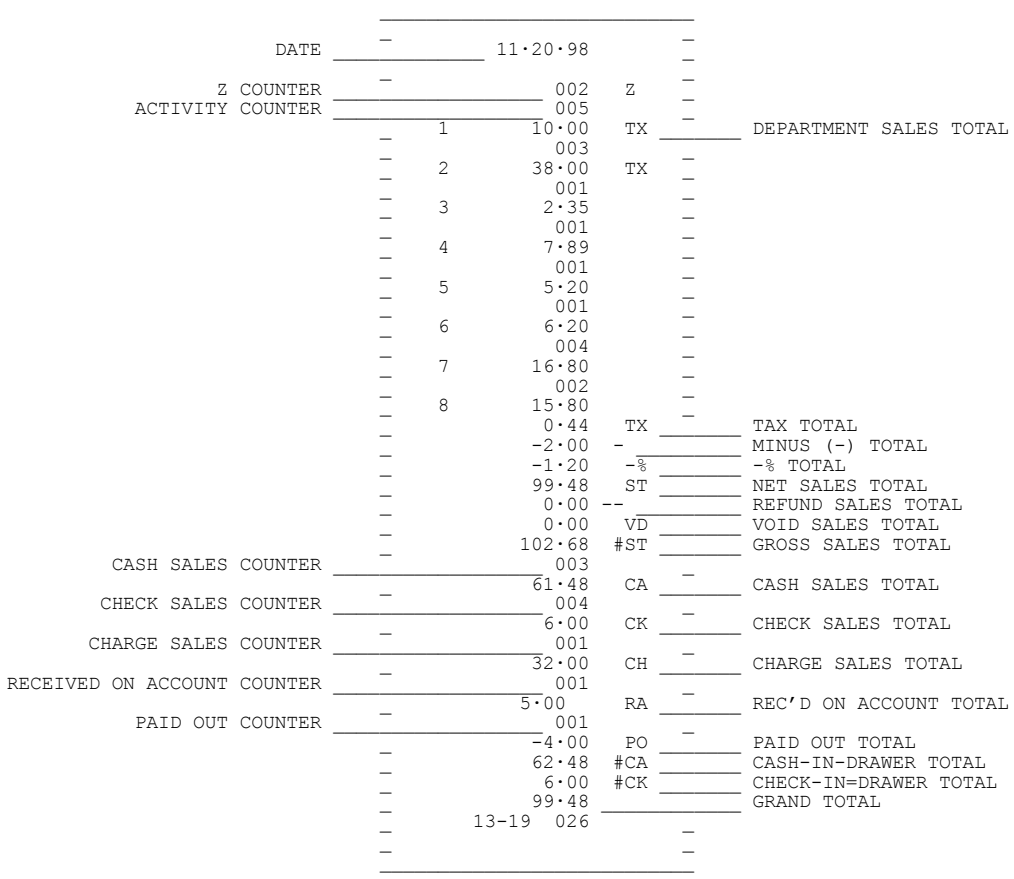
Note: If a security code has been assigned, enter the # and press the [CHARGE] key. If not, continue with Step 2.

2. Type **[2]**, type **[0]**, then press **[RA]**.

After this operation, the grand total reverts to zero.

SAMPLE MANAGEMENT REPORT

The Management Report provides the following information as shown in the sample below:



BALANCING FORMULAS

The following examples illustrate how totals are calculated for the management reports:

System Balance:

(+) DEPARTMENT 1
(+) DEPARTMENT 2
(+) DEPARTMENT 3
(+) DEPARTMENT 4
(+) DEPARTMENT 5
(+) DEPARTMENT 6
(+) DEPARTMENT 7
(+) DEPARTMENT 8
(-) MINUS TOTAL
(-) -% TOTAL
(+) TAX TOTAL

(=) NET SALES

(+) NET SALES
(+) MINUS SALES
(+) -% TOTAL
(+) RETURN TOTAL
(+) VOID TOTAL

(=) GROSS SALES

(+) NET SALES
(+) PREVIOUS GRAND TOTAL

(=) ENDING GRAND TOTAL

Media Balance:

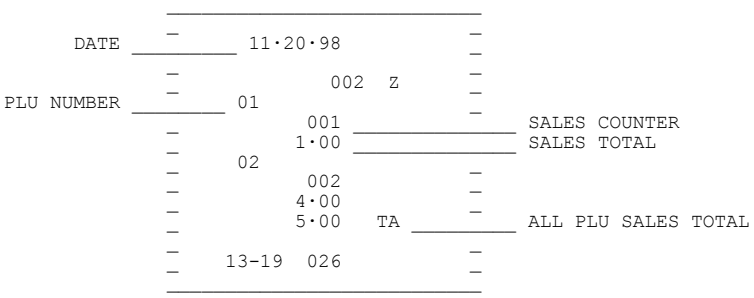
(+) NET SALES
(-) CHECK
(-) CHARGE
(+) RECEIVED ON ACCOUNT
(-) PAID OUT
(-) PAYMENTS OUT

(=) CASH IN DRAWER

PLU REPORT

PLU Reports can be taken in either the X or Z position. Remember, if the PLU Report is taken in the Z position, the total will be reset to zero.

1. Move the Control Switch to the **"X"** or **"Z"** position as desired.
2. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been programmed, continue with Step #3.
3. Press the **[PLU]** key.
4. The PLU Report will print.



TROUBLESHOOTING

In case of operational difficulty:

1. Be sure the unit is plugged into a working electrical outlet and no other electrical device is using the same power source. Another electrical motor on the same circuit could cause interference with register operations.

2. Check that the Control Switch is set to the proper position.

3. Review the operating instructions to be sure the transactions have been performed as described in this instruction manual.

4. If you are in the Program (PRG) or "Z" modes and the error tone sounds and the prompt "SEC Code" appears in the display, this means a manager's security code was programmed. See page 25 for further information.

5. If the register still does not function, use the Full System Clear Procedure:

   CAUTION: The Full System Clear Procedure erases all transaction data AND all programs from the memory.

   A. Turn the side switch to the "Off" position.

   B. Remove the top battery and unplug the register for at least 20 minutes. (Batteries are located in the journal compartment.)

   C. Plug the register back in and replace the battery.

   D. Reprogram the register.

6. If you cannot resolve your difficulty using the previous four steps, feel free to call the Office Zone Service Dept at 1-800-543-5454.

TAX SYSTEM PRESET

In addition to the USA tax mode of ADD-ON TAX which is the standard factory setting for this register, two other tax systems are available as follows:

1. **Canadian Tax System** - Special tax programming for the taxation system in Canada.

2. **VAT (Value Added Tax)** - which means that the tax amount is included in the price of the item. This tax system is most commonly used in European countries.

The tax system is set as follows:

Tax Status Number

Default = 0 USA Tax Mode - Standard Setting for U.S. tax
1 Canadian Tax Mode
2 VAT Tax Mode - Commonly used in European Countries

"PRG" + [3] + [Tax Status Number] + [RA]
1 digit #

1. Enter the Program Mode: Move the Control Switch to the **"PRG"** position. If a security code has been assigned, enter the # and press the **[CHARGE]** key now. If not, continue with Step #2.

2. Type **[3]**, then type the setting number for the tax system desired: **0 = USA Tax; 1 = Canadian Tax; 2 = VAT Tax.**

For USA tax programming, please see Page 21. For VAT tax programming, please see Page 43. For Canadian tax, see Page 44.

Tax Status Number	Condition
00	Non-Taxable
01	Taxable by Tax 1
02	Taxable by Tax 2
03	Taxable by Tax 3
04	Taxable by Tax 4
05	Taxable by Tax 1 and Tax 2
06	Taxable by Tax 1 and Tax 3
07	Taxable by Tax 1 and Tax 4
08	Taxable by Tax 2 and Tax 3
09	Taxable by Tax 2 and Tax 4
10	Taxable by Tax 3 and Tax 4
11	Taxable by Tax 1, Tax 2 and Tax 3
12	Taxable by Tax 1, Tax 2 and Tax 4
13	Taxable by Tax 1, Tax 3 and Tax 4
14	Taxable by Tax 2, Tax 3 and Tax 4
15	Taxable by Tax 1, Tax 2, Tax 3 and Tax 4

VAT TAX SYSTEM

The VAT tax system, which stands for Value Added Tax, is most commonly used in European Countries. With VAT tax, the tax amount is already included in the price of the item, yet the tax amount will print on the receipt. Up to 4 VAT tax rates can be programmed.

To choose the VAT Tax System, please complete the following:

a.Enter the Program Mode: Move the Control Switch to the **"PRG"** position. If a security code has been assigned, enter the # and press the **[CHARGE]** key now. If not, continue with Step #1.

Step 1: Type **[3]**, type **[2]**, then press the **[RA]** key.

Step 2: Program the VAT Tax Rate as follows:

[TAX #] + [TAX SHIFT] + [TAX RATE] + [AMT TEND/TOTAL]
1-4 0 - 99.999%

Example: Program a VAT Tax 1 rate as 15%:

1. If needed, enter the Program Mode: Move the Control Switch to the **"PRG"** position. If a security code has been assigned, enter the # and press the **[CHARGE]** key now. If not, continue with Step #2.

2. Type **[1]**, press **[TAX SHIFT]**, type the tax rate as **[15000]**, then press **[Amt Tend/TOTAL]**.

CANADIAN TAX SYSTEM

To choose the Canadian Tax System, please complete the following:

1. Enter the Program Mode: Move the Control Switch to the **"PRG"** position. If a security code has been assigned, enter the # and press the **[CHARGE]** key now. If not, continue with Step 2.

2. Type **[3]**, type **[1]**, then press the **[RA]** key.

3. Program the Tax Rate as follows:

TAX # + [TAX SHIFT] + [(NON-TAXABLE LIMIT PRICE*) + (REF/-)] + [TAX RATE] + [AMT TEND/TOTAL]		
1-4	Maximum 6 Digits	0 - 99.999%

* The non-taxable limit is used in certain areas where tax is exempted below a certain amount, for example, any amount below $4.00* is exempt from PST tax. If there is no non-taxable limit, simply skip this step in brackets in the procedure above.

CANADIAN TAX - METHOD #1

GST Tax: 7%
PST Tax: 8%
GST/PST Tax: Both 7% and 8% calculated on the net amount

1. Program Tax 1 as 7%:

[1] + [TAX SHIFT] + [7000] + [AMT TEND/TOTAL]

2. Program Tax 2 as 8%:

[2] + [TAX SHIFT] + [8000] + [AMT TEND/TOTAL]

3. Link Tax 1 (7% GST) to the desired Department key:

[001] + [CHECK] + 0 + [DEPARTMENT KEY]

4. Link Tax 2 (8% PST) to the desired Department key:

[002] + [CHECK] + 0 + [DEPARTMENT KEY]

5. Link both Tax 1 (7% GST) and Tax 2 (8% PST) to the desired Department key:

[005] + [CHECK] + 0 + [DEPARTMENT KEY]

CANADIAN TAX - METHOD 2

GST Tax: 7%
PST Tax: 8%
GST/PST Tax: Both 7% and 8% calculated as tax on tax (piggyback calculation)

For the Canadian tax system of TAX on TAX:

Type **[5]**, type **[1]**, then press the **[RA]** key.

1. Program Tax 1 as 7%:

[1] + [TAX SHIFT] + [7000] + [AMT TEND/TOTAL]

2. Program Tax 2 as 8%:

[2] + [TAX SHIFT] + [8000] + [AMT TEND/TOTAL]

3. Program Tax 3 as 8%:

[3] + [TAX SHIFT] + [8000] + [AMT TEND/TOTAL]

4. Link Tax 1 (7% GST) to the desired Department key:

[001] + [CHECK] + 0 + [DEPARTMENT KEY]

5. Link Tax 3 (8% PST) to the desired Department key:

[003] + [CHECK] + 0 + [DEPARTMENT KEY]

6. Link both Tax 1 (GST) and Tax 2 (PST) to the desired Department key:

[005] + [CHECK] + 0 + [DEPARTMENT KEY]

7. Program for tax on tax calculation (piggyback):

[9] + [1] + [RA]

For customer assistance call 1-800-543-5454.

CALCULATING STATE TAX TABLE CODES

"EXAMPLE TAX CHART"

STEP C: Enter the base tax amount (the minimum point where no tax is charged) followed by the Number "1". Then **press** the **[TAX SHIFT)** key.

STEP D: Enter the 6 digit number (see Page II-b) (i.e. 4% = 240096).

STEP E: Enter the individual "Irregular" breakpoint pattern. **Press** the **[TAX SHIFT)** key after each breakpoint. Place the number "10" before the last "Irregular" breakpoint. (13, 19, 23, 27, 27, 1029)

STEP F: Enter the individual breakpoints of the "Regular" breakpoint pattern. **Press** the **[TAX SHIFT)** key after each breakpoint. Place the number "10" before the last "Regular" breakpoint. (25, 25, 25, 1025)

STEP G: To summarize, combine the Steps A through F and maintain the information for future use.

121 [TAX SHIFT)
240096 [TAX SHIFT)
13 [TAX SHIFT)
19 [TAX SHIFT)
23 [TAX SHIFT)
27 [TAX SHIFT)
27 [TAX SHIFT)
1029 [TAX SHIFT)
25 [TAX SHIFT)
25 [TAX SHIFT)
25 [TAX SHIFT)
1025 [TAX SHIFT)

STEP A

STEP B Breakpoints	SALE AMOUNT from	to	TAX AMOUNT
	0	12	0
13	13	31	1
19	32	54	2
23	55	81	3
27	82	108	4
27	109	137	5
29	138	162	6
25	163	187	7
25	188	212	8
25	213	237	9
25	238		10

NOTE: A total of 63 breakpoints can be programmed on this cash register.

"THE WORKSHEET"

Write down your results as you go.

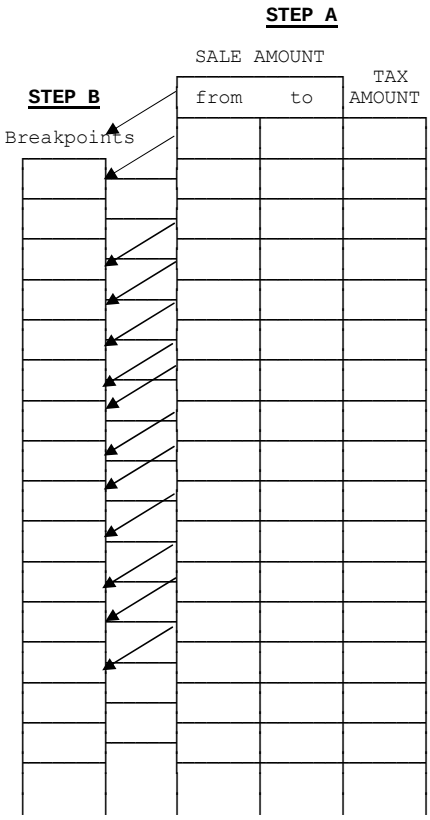
STEP C:

STEP D:

STEP E:

STEP F:

STEP G:



Royal

115**cx**

Cash Management System

Owners Manual

8 Departments / 99 PLUs
Portable
4 Clerk Totals
Automatic Tax Computation
4 Tax Tables
Currency Conversion
Security features

Programmable Electronic Cash Register

Easy Set-Up Instructions
see page 12

WELCOME...

to the Royal family of fine business machines.
We sincerely hope you will enjoy the many benefits
of being associated with a distinguished product
name that has represented both quality and
customer satisfaction since 1905.

This electronic cash register is designed to help your business function smoothly by providing efficient register operations and accurate management reports. Start-up is quick and easy, yet there are many options that can be added and revised so that you can customize your operations for optimum productivity. Here are just a few of the register's many valuable features:

- 8 departments and 99 PLU settings
- Portable, battery powered
- 4 Clerk Totals
- Security system
- Choice of Journal or Customer Receipt printout
- Automatic tax computation for tax rate (Canadian Tax and VAT - 4 Rates)
- Up to 4 Tax Tables
- Currency Conversion
- Department-linked entry options that streamline and speed-up operation
- Periodic management reporting systems
- Battery back-up / memory protection of records

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INTRODUCING ... YOUR CASH REGISTER

STANDARD ACCESSORIES

The following are included in the box with your cash register:

- 1 black plastic journal winder spindle
- 1 roll of standard paper tape
- 1 ink roll (already installed)
- AC Power adapter
- 2 Cash Drawer / Journal Lock keys
- Instruction Manual
- Quick Start Sheet

USING THIS MANUAL

Your Cash Register manual is organized for easy reference. The front portion contains general information on all features and functions of the cash register. Instructions for setting the optional programs are next. Transaction examples for operating the register are at the back of the manual. Use the **TABLE OF CONTENTS** to locate a particular item.

Throughout this manual, references to the keypad are shown bolded and in brackets. References to the operational keys are preceded by the word "press". For example: Press [SUBTOTAL]. Or: Press [DEPARTMENT 1]. References to the numeric keypad are preceded by the word "type". For example: Type the number [1].

GETTING STARTED

Important note: The cash register must be first plugged in before installing the back-up batteries.

Before you begin to operate the register or set the programs, check **SETTING UP AND MAINTAINING THE CASH REGISTER** for installation information. Review **KEYPAD FUNCTIONS, THE CONTROL SYSTEM** and **THE DISPLAY** to become familiar with their operations.

NOTE: Programs and transaction information for management reports are stored in the memory of the cash register. The batteries must be installed to save this information.

SETTING THE REGISTER PROGRAM

Transaction examples provide steps for key operations. Sample receipts are included.

Royal's helpful "Quick Start" program (Page 12) will provide you with the most basic programming options for the operation of your new cash register. Many users find "Quick Start" the best way to begin to learn about the many capabilities of the machine.

OfficeZone www.officezone.com 1-800-543-5454

SPECIFICATIONS AND SAFETY

MODEL:	Royal 115cx
TYPE:	Electronic cash register with printer and 16 departments.
DISPLAY:	LCD Single Display. Cashier only. Symbols for error, change, subtotal, minus, total and item count.
CAPACITY:	7 digits input and readout.
PRINTER:	ECR exclusive serial printer.
INK SOURCE:	Black Ink Roll (ROYAL brand PCUA #013109)
PAPER SUPPLY:	57MM (2 1/4" Single-Ply Register Tape (ROYAL brand PCUA 013129)
MEMORY BATTERY PROTECTION:	Approximately 30 days after power interruption.
TECHNOLOGY:	CMOS RAM
POWER CONSUMPTION:	Standby - 15W, Operating - 47W
OPERATING TEMPERATURE:	0-40 Degrees Centigrade (32-104 Degrees Fahrenheit)
DIMENSIONS:	16 3/4" x 12 3/4" x 10 1/4"
WEIGHT:	13 lbs.

SAFETY NOTICE

The main outlet for this cash register must be located near the unit and easily accessible.

Do not use this cash register outdoors in the rain or near any source of liquid.

WARNING

"This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference."

SETTING UP AND MAINTAINING THE CASH REGISTER

SETTING UP YOUR CASH REGISTER

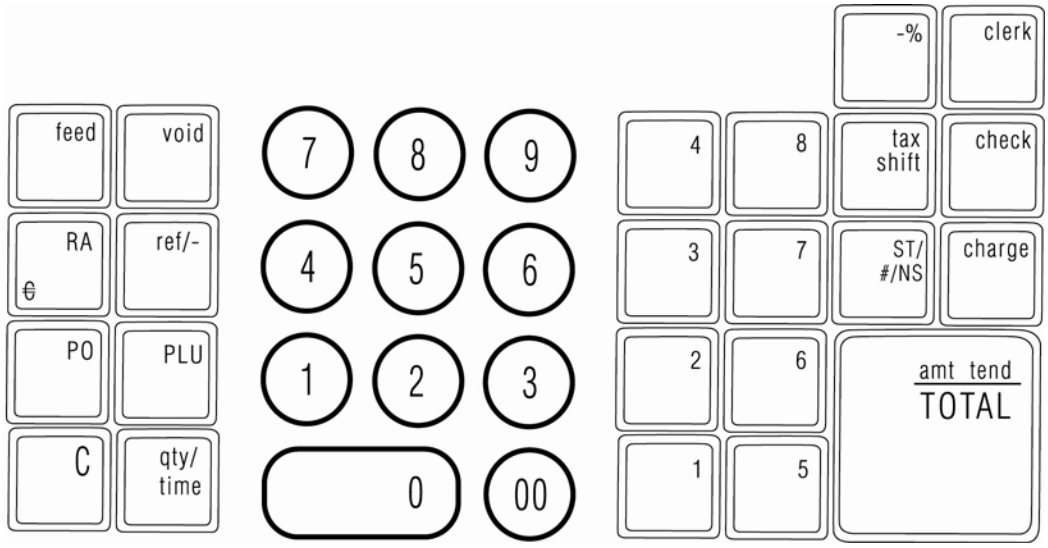
IMPORTANT - Please read this section carefully before attempting to operate the cash register or set the programs.

1. Place on a level surface to permit smooth operation of the cash register.
2. Plug in the electrical connection to an appropriate outlet.
3. Install batteries. (See Page 9) **Do not install batteries unless the register is plugged in**.
4. Install paper. (See Page 10)
5. Set desired program options using Quick Start (Page 12).
6. Set the Control Switch to R1 (journal record) or R2 (customer receipts).
7. The machine is ready for cash register transactions.

MAINTAINING THE CASH REGISTER

- Never cover the cash register when turned on. Doing so will prevent proper cooling of the electronic components.
- Cover the register when not in use to protect components from dust.
- Take care to keep all liquids away from the machine to avoid spills which could damage electronic components.
- To clean, use a soft, dry cloth. Do not apply organic solutions such as alcohol.
- Your cash register should be kept in areas free from dust, dampness or extreme hot or cold temperatures.
- If stored in extreme temperatures (below 32 degrees or above 104 degrees Fahrenheit), allow the temperature inside the register to reach room temperature before turning on.
- DO NOT attempt to pull the paper tape when printing or installing paper. Always use the [Feed] key to advance the paper. Pulling the tape could damage the print mechanism.
- If electronic service is necessary, an authorized service center is recommended.
- Familiarize yourself with the safety statements on Page 2.

KEY PAD FUNCTIONS



1. **Control Lock** - Locks and unlocks the printer cover. In "open" position, it allows access to the journal compartment and management control switches.

2. **[Feed] - Paper Feed Key** - Advances the paper tape with no effect on register entries.

3. **[VOID] Void/Error Correction** - Used to correct an entry after it is printed or to void the previous entry.

4. **[Ref/-] - Dual Function: Coupon** - Subtracts the amount from an item or the sales total, such as a coupon deduction. **Refund** - Subtracts an item that is returned for refund. Minus key totals are shown in the management report.

5. **[RA/EURO] - Received on Account Key** - used to register any money received on account that is not part of a sale; i.e., the start-up money put in the drawer at the start of each business day can be registered as an RA. This key also functions as Euro key for Euro Dollar Conversion.

6. **[PO] - Paid Out** - Registers any money paid out or taken out of the cash drawer that is not part of a sale. Paid out totals appear in the management report.

7. **[PLU] - Price Look Up** - Registers the preset price of an individual item to the appropriate department.

KEY PAD FUNCTIONS

8. **[C] - Clear Entry and Stop Alarm Key** - Clears entries made on the keyboard prior to depressing the registration key. Also stops the error alarm when incorrect entries are made.

9. **[QTY/TIME] - Dual-Function: Multiply, Display Time** - Multiplies [DEPARTMENT], [PLU] or [Ref/-] key entries; also displays the current time, if set.

10. **Department Keys** - Used to select non-taxable and taxable sales at the pre-programmed tax rate.

11. **Numeric Entry Keys**

12. **Clerk Key - Used to identify associate transaction with a particular clerk. Supports up to 8 Clerks and an optional security code.**

13. **[-%] - Percent Discount Key** - Used to subtract a percentage rate from an individual item or an entire sale. The rate can be a pre-programmed percentage rate or any other manually entered percentage rate.

14. **[#/NS] - Non Add/No Sale Key** - Opens the cash drawer and prints reference data, like driver's license, telephone or social security numbers.

15. **[TAX SHIFT] - Tax Shift Key** - Used to enter a non-tax item into a taxable department or to enter a tax item into a non-taxable department.

16. **[CHECK]** - Total sales paid by check. Check totals appear in the management report.

17. **[SUBTOTAL] - Subtotal Key** - Used to obtain a subtotal of all entries with tax added.

18. **[CHARGE] - Charge Key** - Used to total sales that are charged.

19. **[Amt Tend/TOTAL] - Amount Tendered and Cash Total Key** - Used to total transactions, compute change and obtain daily grand totals of all transactions in "X" and "Z" positions.

Comment:

THE CONTROL SWITCH

The Control Switch (under the Journal Compartment) must be properly positioned to operate the cash register or set the programs. The Control Switch is also used to print or reset the totals for the management report.

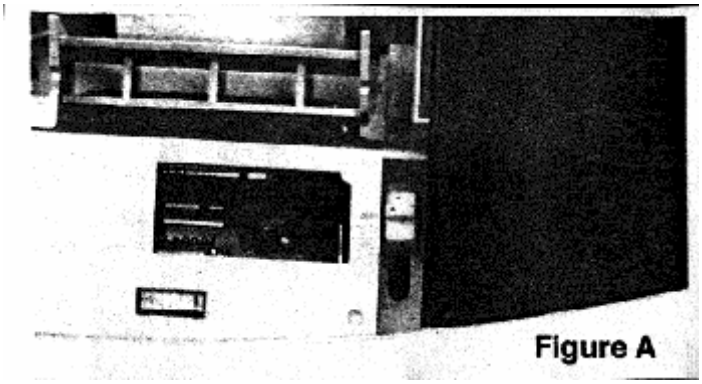


Figure A

Depending on the desired operation, position the Control Switch as follows:

"OFF" - The cash register is turned off and inoperable.

"R1" (On/Journal Tape) - The cash register is set for standard operations, including preset options. A journal record is printed for each transaction.

"R2" (On/Customer Receipt) - The cash register is set for standard operations, including preset options. A customer receipt prints for each transaction.

"X" (Management Report) - Prints the "X" management report.

"Z" (Prints Management Reports and Resets Totals) - Prints the "Z" management report and resets totals (except "locked in" grand total) to zero.

"PRG" (Program Mode) - Used to set and change program settings.

REMOVABLE CASH DRAWER WITH LOCK

The cash drawer will open after completing a cash, check or charge transaction by pressing the [#/NS] key, or by the hidden emergency lever underneath the register.

The cash drawer is electronically locked when the control switch is in the "OFF" position. In addition, the cash drawer is designed with a security lock with key that manually locks the cash drawer and prevents electronically opening it by the [#/NS] key or by the hidden emergency lever underneath the register.

The cash drawer can be completely removed from the register by lifting up on the open drawer and pulling toward you.

READING THE DISPLAY

The display shows entry amounts and related transaction information through use of numbers and special symbols. Display windows are situated so that operator can view the operations.

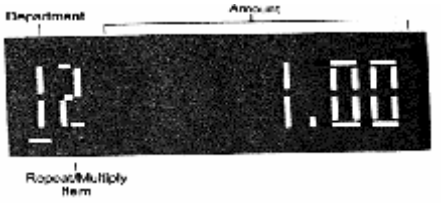
The display is read from left to right as follows.

Department - The first digit displays the department key pressed for each entry.

Repeat/Multiply - The second digit displays when repeating or multiplying items to indicate the number of items entered at one price.

Amount - The remainder of the display shows the entry amount. Up to 7 digits can be used for the amount of each entry.

For example, if you register a $1.00 item to Department 1 and repeated the entry, the display would show:



Special Symbol Indicators

Special symbols appear at the far left of the display during operation of the cash register. These symbols identify the amount shown, warning of an error condition or indicate use of the program mode. They include:

(Change) - Indicates the displayed amount is change due to the customer.

(Minus) - Displays for a negative entry. Also displays if subtotal or cash tendered total is a negative number due to a return or refund.

(Subtotal) - Indicates amount shown is a subtotal, including tax if applicable.

(Total) - Indicates amount shown is the total of the transaction.

(Error) - Displays if an error is made during operation or when setting programs. An error tone sound to alert the operator.

SEC Code - Displays when a security code has been programmed and an entry is attempted in either the Program (PRG) or Z modes.

These symbols clear automatically when you start the next entry or press the **[C]** Clear key.

DISPLAYING THE TIME

Simply press the **[QTY TIME]** key to display the current time. (See **THE REGISTER PROGRAMS** to set the time). The time can be displayed in either a 12 or 24 hour format. (See Page 15). The displayed time is automatically cleared once a transaction is started.

NOTE: Trying to use this feature during a transaction will result in an error tone. If this occurs, press **[C]** to clear the error.

ERROR CONDITIONS

THE ERROR ALARM SYSTEM

The error alarm system warns of an operator error (usually pressing the wrong key for a specific type of entry) or an error when setting a program option. When the error tone sounds, an "E" appears in the display and the keypad locks. An error tone will be played if a cash register function is not programmed.

To clear the "E" error, simply press the [C] Clear key.

NOTE: Moving the Control Switch from "R1" or "R2" to another position before completing a transaction will result in an error condition to remind you to total the transaction.

Clearing an Error:

1. Press the **[C]** Clear key. The tone ends, the display clears and the keypad unlocks.
2. Determine what error was made.
3. Continue with the transaction or restart the program.

NOTE: The **[C]** Clear key also clears an incorrect entry from the display prior to pressing a registration key. Once an entry is printed, the **[VOID]** key must be used to correct an error.

VOIDING ERRORS

Once an entry is printed on the tape, the **[C]** Clear key cannot be correctly used. Use the **[VOID]** key to correct an error just registered.

1. Voiding the Entry Just Completed:

If the transaction has not yet been completed, to erase the entry, simply press the [VOID] key. The entry is reprinted with a "VD" symbol following the amount and erased from the transaction.

2. Voiding an Earlier Entry:

To void an earlier entry:

1. Complete and total the transaction, including the error.
2. Press the [VOID] key.
3. Retype the incorrect information, exactly as originally entered.
4. Total the transaction.

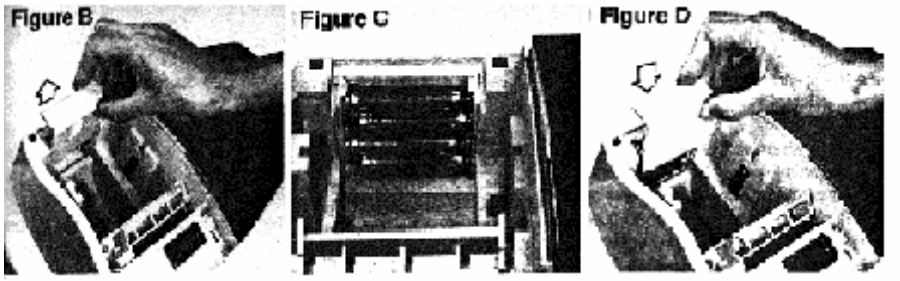
THE POWER SYSTEM

THE 115cx register is portable and can be operated in remote locations, away from a power outlet, by using **4** C-size batteries (not included). Examples are: kiosks, craft fairs, flea markets, or in areas where power outlets are not easily accessible. The register can also be operated and powered by an AC adapter and one is included along with the standard supplies in this package.

During cash register operations, all transaction data for the management report is stored in the register's memory. The memory also holds all the optional program information. The memory back-up system keeps this information stored in memory when the cash register is turned off.

The memory is protected by 4 standard "AA"-size (1.5-Volt) batteries that should be installed before programming the register. Always connect the register to a power outlet **BEFORE** installing the 4 AA batteries. Batteries are not included with the 110cx register. These must be purchased separately.

This register does not come with the 4 "AA" batteries which, when properly installed, provide back-up power to the register memory if the power cord is accidentally disconnected or if a power interruption occurs. The daily transactions and locked in grand total will be retained by the machine without (AC) power because of the memory protection feature. Average battery life protection is approximately 30 days after power interruption.



TO INSTALL OR REPLACE BACK -UP BATTERIES:

1. Turn the control key to the "open" position, open the printer cover as described on Page 10 and move the control switch to the "R1 or "R2" position.

2. Remove the battery cover, located at the back of the printer mechanism. (Figure B).

3. Position the batteries as indicated (Figure C) making sure that the positive and negative poles are aligned correctly.

4. Replace the battery cover by sliding down in position. (See Figure D).

5. Close the printer cover.

NOTE: It is important that the unit is plugged in before the batteries are installed.

NOTE: In order to assure continuous battery back-up protection, it is important that the batteries be changed at least once every year.

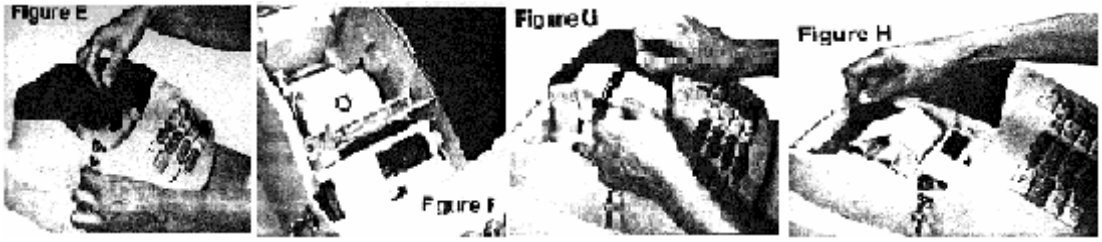
TO INSTALL OR REPLACE BATTERIES FOR PORTABLE USE:

With the register in the OFF position, open the compartment at the back and to the left of the register. You'll see a battery diagram for proper installation of the 4 C batteries. Simply follow the diagram and install the batteries. To conserve battery life, when not necessary, use the AC adapter for power. Also on the back of the register, there is a connection for the AC adapter and the "power brick" is plugged into a power outlet.

LOADING PAPER

HOW TO LOAD THE PAPER

This register uses standard 2 1/4" single ply calculator paper to produce either a customer receipt (outside) or a journal record (inside).



NOTE: It is recommended to use ROYAL brand 2 1/4" (57mm) "bond quality" paper which will help prevent dust deposits on the printer mechanism caused by inexpensive paper rolls. Replace with standard bond quality calculator paper. **ROYAL Order #013129**.

1. Plug in your cash register and turn the control lock to the "open" position.
2. Grasp the printer cover and pull gently up. Remove the printer cover and set aside. (Figure E)
3. Cut or tear the end of the paper roll evenly for a straight edge to permit proper feeding through the printhead.
4. Place the paper roll in the paper holder so that the paper will feed out from the bottom of the roll.
5. Insert the end of a single paper tape into the paper slot. (Figure F). Adjust writing table as needed to insert the paper.
6. Depress the paper feed [Feed] key until the paper catches and advances through the printer.
7. If the paper does not feed through the printer, make sure the paper was entered properly.
8. Pass the tape through the receipt window of the printer cover.

or

If a journal record is desired, insert the tape into the journal winder. Simply advance the tape approximately 10-12 inches by using the paper feed [Feed] key. Then, slide the tape under the two forks that extend on both sides of the journal winder. (See Figure H). Turn the spindle manually a few times to take up the excess paper. Then advance the paper using the Feed key until the journal paper winds securely around the spindle. (Figure H]

9.Replace the spindle and close the printer cover.

INSTALLING INK ROLL

HOW TO CHANGE THE INK ROLL

This register comes equipped with the ink roll installed. The ink roll releases special ink to the printhead which produces printout on the paper. After a period of time, depending upon the amount of use, the ink in the roll will be used up. When printout becomes faint, the ink roll needs to be replaced.

CAUTION:

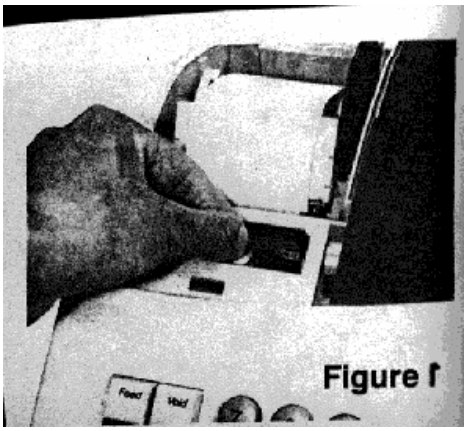
The ink roll is NOT designed to be re-inked. Under no circumstances should this be done or permanent damage to your cash register printhead will result. Such damage WILL NOT be covered under Royal's warranty.

REPLACE YOUR INK ROLL FOLLOWING THE INSTRUCTIONS BELOW:

1.Turn the control key to the "open" position and open the printer compartment.

2. The ink roll is found in front of the printhead mounted in a plastic cartridge. To remove, grasp the small clip on the left of the ink roll and pull up. The ink roll will easily pull away from the printhead. (Figure I)

3. To replace a new ink roll, insert the ink roll according to markings "L" (Left) and "R" (Right) by pressing downward to lock it into position, then close the printer cover. No tools are necessary. For best performance, store unopened ink roll package in a cool, dry place until installed.



NOTE: Replace with ROYAL Ink Roll, **Order #013109**.

QUICK START

Quick Start is a brief but complete start-up program that allows you to "get started" immediately on the most basic aspects of operating your new cash register. Follow these directions precisely:

1. **Read and follow the machine ORIENTATION and set-up instructions on pages 1-11. Reminder: It is important that the register is plugged in before the back-up batteries are installed.**

2. Perform the following Quick Start programming procedures:

   A. Open the printer compartment and place the control switch at the PRG (Program) position.

   B. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been programmed, continue with step C.

   C. Set the current date by typing the numeric keys to represent the **month/day/year**. Single digits must be preceded by a zero. For example, to set June 8, 1998, type **[060898]**. Finalize by pressing the **[ST/#/NS]** key.

   D. Set the current time using the 24-hour clock format. For example: to set 9:15 A.M., type **[0915]**; to set 7:15 P.M., type **[1915]**. Finalize this entry by pressing the **[QTY/TIME]** key.

   E. Set the decimal point as follows (U.S. standard): Type **[1]**, **[2]** and press the **[RA]** key.

   F. To set a fixed Tax Rate: Type **[1]** for tax rate #1, then press the **[Tax Shift]** key. Then type the tax rate as a 4-digit number. For example, if your tax rate is 8%, type **[8000]**; if your tax rate is 7.5%, type **[7500]**. Then press the **[Amt/Tend/TOTAL]** key.

   Please note for the next steps you will use the Department Keys which are the keys (Dept Shift, 1-8) located directly to the right of the numeric keys.

   G. In these examples, we will program the register to accept a zero price; press **[8]**, **[1]** and then press the **[RA]** key.

   H. Program Department 1 as taxable items. To do this, type the numeric keys **[0][0][1]**, press **[CHECK]**, type **[1][0][0]** and finalize by pressing the **[Department 1]** key. Repeat this procedure for all departments you wish to tax. Optional: If you wish to enter preset department prices, see page 18 for details.

   I. Program Department 2 as non-taxable items. To do this, type the numeric keys **[0][0][0]**, press **[CHECK]**, type **[1][0][0]** and finalize by pressing the **[Department 2]** key. Repeat this procedure to all the departments you wish not to tax. Optional: If you wish to enter preset department prices, see page 18 for details.

   J. Basic programming is now complete.

3. To ring up sales, slide the control switch to the R1 or R2 position (R1 winds a Journal Record on the spindle, whereas R2 gives you Customer Receipts through the window opening, as described fully on page 10). Follow the instructions given in "Transaction Examples".

4. To print Management Reports, slide the control switch to the X or Z position as needed, then press the **[Amt Tend/TOTAL]** key. Refer to explanation on page 37 - 41.

Once you have mastered the Quick Start operations, you may want to take advantage of other valuable register functions such as Percent Discount Rate on page 17, Price Look-Ups (PLUs) on page 23 and Security Code on page 25. If you have questions regarding Quick Start or any other aspects of the machine operation, call the Office Zone Product Support Hotline at 1-800-543-5454 ext. 129, Monday through Friday, 8:00 A.M. to 5:00 P.M. MT.

HELPFUL HINTS FOR A SUCCESSFUL START-UP

With reference to specific steps in "Quick Start":

2-F Tax Programming - As an alternative to using your state's fixed rate percentage you may now or later want to use the actual state tax codes in Appendix 2. The procedure outlined on page 22 can be used in place of Step 2F of the Quick Start.

Note: For the most current state tax tables, please visit **www.royal.com**, the cash register section. A current copy of state tax tables can be downloaded from this site.

GENERAL INFORMATION

- It is not necessary to re-program the entire machine to make a single program change or correction. If you wish to make a change, such as an update on state tax rate, be sure you are in the program mode, then re-do the program in question. A new program entry will automatically override a previous entry.

- Remember; you enter the program mode by moving the Control Switch to the PRG position.

- Be sure to slide the control switch to the "Off" position at the end of a business day.

- In order to assure continuous battery back-up protection, it is important that the batteries be changed at least once every year.

SETTING PROGRAMS

This cash register allows you to set programs customized to your individual business requirements. These programs include:

- Setting the Time and Date
- Setting the Clerk System
- Setting a Percent Discount (-%) Rate
- Assigning a Department Tax Status and Pre-set Department prices
- Setting a Tax Rate
- Creating Price Look-Ups
- Assigning a Security Code for the Program and "Z" Management Report Modes

Set some or all of the programs, depending on your business needs. Once selected, these programs reside in the register's memory until you change them.

NOTE: Be sure memory back-up batteries are installed before setting these programs.

SETTING PROGRAMS

All programs are set by first entering the program mode. They are entered using the numeric keypad [0-9] and appropriate operation keys. Program selections appear in the display to verify entry and are printed on the receipt.

In this section you will find simple step-by-step procedures for each program. Following each procedure is an example. We suggest you complete the examples to become familiar with the program, then reset the programs according to your own requirements.

Entering the Program Mode:

1. To access the Control Switch, unlock and open the printer cover.

2. Set the Control Switch to the "PRG" position.

   NOTE: If a security code has been assigned, enter the security code and press the **[CHARGE]** key now.

3. Once in the program mode, you can set some or all of the programs.

Exiting the Program Mode:

After all the desired programs are set, simply move the Control Switch to the "R1" or "R2" position to begin operations or turn to the "Off" position if you are finished.

Clearing Errors:

If an error tone sounds, press the **[C]** key to clear the display. Reenter the program step.

If the prompt "SEC Code" appears, this means a security code was programmed. Enter the 4-digit code followed by the [CHARGE] key. Then proceed with programming.

Note: While you are programming your register, you might shift to R1 or R2 mode to test a feature by running a transaction. If you do not [TOTAL] the transaction, when you return to PRG mode an error tone will sound. Simply return to R1/R2 and [TOTAL] the transaction and then return to PRG mode.

SETTING THE DATE AND TIME

Set the date option to print the current date at the top of each receipt, journal record or management report. The current time can also be displayed by pressing the **[QTY/TIME]** key.

Set the time option to print the current time at the bottom of the receipt. The time will automatically print and display in the 12 hour format. The time prints in the following format: HH•MM. For example: 9:30. If the time is PM, the receipt will print .9-30.

The date and time change automatically as long as the back-up batteries are installed.

Setting the Date:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[the numbers]** representing the current date. Use the following format: MMDDYY. NOTE: Single digit numbers for months and days must be preceded by a zero [0].
3. Press the **[#/NS]** key to store the date.
4. Continue with the next program or move the Control Switch out of the Program mode.

Example: Set a date of March 7, 1998

Type/Press:	The Display Shows:	The Receipt Shows:
030798 + [#/NS]	307.98	03·07·98

Date Format: The date will automatically print in the following format: MM-DD-YY (Month-Day-Year). For example: 03·07·98.

To select the Day-Month-Year format:

1. Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[7] [1]** and press **[RA]**.
3. Continue with the next program or move the Control Switch out of the Program position.

To change back to the Month-Day-Year setting, at Step 2, type **[7] [0]** and press **[RA]**.

Setting the Time:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2).
2. Type **[the current time]** using the following format: HHMM.
3. Press the **[QTY TIME]** key to store the time.
4. Continue with the next program or move the Control Switch out of the Program mode.

Example: Set the time at 3:30 PM: (with 12 hour format)

Type/Press:	The Display Shows:	The Receipt Shows:
1530 + [QTY TIME]	15·30	15-30

SETTING THE CLERK SYSTEM

The Clerk System allows transactions to be associated with a clerk #. Optionally, there can be a security code assigned to each clerk # and the register supports up to 4 Clerks. The benefit of the system is that sales can be tracked by clerk; a Clerk report captures the number of transactions and sales.

There are a few steps to set up the Clerk System.

- Activate/Disable the Clerk System
- Assign Clerk # with or without a security code entry reguired
- Assign the security code to a Clerk #

Activate/Disable the Clerk System:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[44444]**
3. Enter either **[0]** or **[1]** [0] disables the Clerk System; [1] activates the Clerk System.
4. Press the **[Amt/Tend/TOTAL]** key to finish.

Assign Clerk # and Security Code Entry:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[11]**
3. Enter either **[0]** or **[1]** [0] Clerk # only; [1] Clerk # and security code.
4. Press the **[Amt/Tend/TOTAL]** key to finish.

To Assign a Security Code to Clerk #:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[444444]**
3. Press the **[Amt/Tend/TOTAL]** key
4. Enter the **Clerk** # (1 - 4)
5. Enter the (security code) 3 digits. Examples: 123 222, 212 ...
6. Press the **[Clerk]** Repeat steps 4, 5 and 6 for each Clerk # you want to have a security code.
7. Press the **[C]** key to finish.

Printing the Clerk Report:

To print a report of sales by clerk, once the system is activated and Clerk #s assigned, in x mode, press the **[Clerk]** key.

Using the Clerk Feature

Before entering a transaction, press the number on the numeric pad followed by the [Clerk} key to record transactions to that Clerk number.

PERCENT DISCOUNT (-%)

Setting this option automatically calculates the preset rate each time the [-%] key is pressed. This percentage rate can be discounted from an individual item or an entire transaction.

You can override the program rate by manually entering a different rate. (See **TRANSACTION EXAMPLES FOR OPERATING THE CASH REGISTER**).

Setting a Percent Discount (-%) Rate:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.

2. Type **[the numbers]** representing the desired percentage rate.

   NOTE: Up to four digits, 0-99.99, can be used. For example: to enter 10%, type 1000; to enter 6.5%, type 650.

3. Press the **[-%]** key to store the rate.

4. Continue with the next program or move the Control Switch out of the Program mode.

Example: Set a percent discount rate of 5%:

Type/Press:	The Display Shows:	The Receipt Shows:
500	5·00	
[-%]	5·00	5·00 %-

To set a percent discount rate of 10%: press [1000] and then press the [-%] key.

DEPARTMENT TAX STATUS

A total of 16 departments are available on your cash register. Each department can represent a category of merchandise. For example, Department 1 can represent sales of beverages, Department 2; sandwiches, Department 3; candy, etc. Each department can be programmed as taxable or non-taxable. If desired, each department can also be programmed with a preset price.

The programming of the departments consists of 3 steps; selecting the Multiple/Single Item Sale, Tax Status and Department Preset Price.

1. **Tax Status** - allows you to tax or not to tax a department key.
2. **Multiple/Single Item Sales** - Multiple Item Sale (Standard) allows many items to be rung up within a transaction. Single Item Sale allows only one item to be rung up in a transaction.
3. **Department Preset Price** (Optional) - allows you to program a price in a department key to save time when ringing up a sales entry. The price will automatically ring up each time the appropriate department key is pressed.

Note: You can have up to 4 Tax Rates. These are set in the section - Tax Rate. Use the chart below to determine how you want a department to calculate taxes. Keep in mind, for the sake of simplicity, you can set just 1 fixed rate and use that for all departments.

Tax Rate Chart

S2 Code		USA	CANADIAN	VAT
00	Non-Taxable	☐	☐	☐
01	Taxable by TAX 1	☐	☐	☐
02	Taxable by TAX 2	☐	☐	☐
03	Taxable by TAX 3	☐	☐	☐
04	Taxable by TAX 4	☐	☐	☐
05	Taxable by TAX 1 and TAX 2	☐	☐	
06	Taxable by TAX 1 and TAX 3	☐	☐	
07	Taxable by TAX 1 and TAX 4	☐	☐	
08	Taxable by TAX 2 and TAX 3	☐	☐	
09	Taxable by TAX 2 and TAX 4	☐	☐	
10	Taxable by TAX 3 and TAX 4	☐	☐	
11	Taxable by TAX 1, TAX 2 and TAX 3	☐	☐	
12	Taxable by TAX 1, TAX 2 and TAX 4	☐	☐	
13	Taxable by TAX 1, TAX 3 and TAX 4	☐	☐	
14	Taxable by TAX 2, TAX 3 and TAX 4	☐	☐	
15	Taxable by TAX 1, TAX 2, TAX 3 and TAX 4	☐	☐	

ZERO PRICE ENTRY SETTING

This procedure allows a "0" price to be entered for a department or PLU price. The default setting does not accept a "0" price.

1. Enter the **Program** mode: Move the Control Switch to the "PRG" position.
2. To allow zero price entry, type **[8]**, then **[1]**, followed by the **[RA]** key.
3. To prohibit zero price entry, type **[8]**, then **[0]**, followed by the **[RA]** key. **Please note this is the default setting**.

TO PROGRAM DEPARTMENTS AS TAXABLE

Example: Program Department 1 as taxable, using Tax Rate 1, multiple entry and pre-set price of 1.99:

1. Enter the program mode. Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.
2. Type **[0]** or **[1]** 0 = Multiple Sales ; 01 = single item
3. Type (S2 Code) **[2-digit #]** from the Tax Rate Chart above.
4. Press the **[CHECK]** key.
5. Type **[Pre-set Price]**. If you do not wish to program a department pre-set price, enter "0".
6. Press the **[DEPARTMENT]** key.

Repeat these steps for each department you will be using.

Example: [0] + [01] + [Check] + [199] + [Department 1]

TO PROGRAM DEPARTMENTS AS NON-TAXABLE

Example: Program Department 2 as non-taxable, multiple entry and no pre-set price:

1. Enter the program mode. Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.
2. Type **[0]** for Multiple Item Sale, then type **[00]** for no tax. Press the **[CHECK]** key.
3. Press **[0]** for no pre-set price, then press the **[DEPARTMENT 2]** key.

Example: [0] + [00] + [Check] + [0] + [Department 2]

TAX RATE

Programming the Tax Rate

The 115cx supports up to 4 Tax Tables; therefore, it allows 4 separate rates to be established and each of those rates can be linked to a department. For instance, Tax1 could be 6%, Tax2 could be 8%, Tax3 could be 5.5% and Tax4 could be 2%. By establishing separate tax rates, a separate Tax rate total is printed on the management report, if you want to know taxes paid by rate.

Each tax rate can be programmed as either a **fixed percent tax rate** or **tax table rate**. The fixed rate is a fixed percentage charged on the total item. For example, 5%. A tax table rate is based on an approved chart issued by individual states.

NOTE: Individual state tax tables are available to be downloaded at www.royal.com as part of the Cash Register section.

The tax system can be set for one of the following settings:

0 = USA Tax Mode (standard setting for U.S. tax)
1 = Canadian Tax Mode
2 = VAT Tax Mode (commonly used in European Countries)

The cash register has already been set at the factory for the USA Tax Mode. If you need to change to the Canadian Tax System or to the VAT Tax System, following the instructions in those sections.

See the next page for programming details.

TO PROGRAM A FIXED TAX RATE: (Recommended For Most Applications)

"PRG" + Tax 1 - 4 + [Tax Shift] + Tax Rate (4 Digit #) + (Amt/Tend/TOTAL)

Note: You can program up to 4 Tax Rates or just 1. The following steps allow you to set up 1 or up to 4. Remember, when you determine a department's tax status, at that point, you identify the tax rate you want for that department.

If you make a mistake between steps 2 and 4, press the Clear **[C]** key and start again at step 2.

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Enter **(1 - 4)** , 1 through 4 being the Tax Rate identifier.
3. Press **[Tax shift]** key
4. Enter the **Tax Rate**. Up to 5 digits can be used. You MUST enter three digits after the desired decimal place. For example, to enter 5.5%, type **[5500]**; to enter 7%, type **[7000]**; to enter 10%, type **[10000]**.

Note: If you want to set up another Tax Rate, return to step 2. When you are finished setting Tax Rates, go to step 5 to complete the procedure.

5. Press the **[Amt Tend/TOTAL]** key.

Continue with other programming or move the Control Switch out of the Program mode.

Example: Set a tax rate of 5.5%:
1. If needed, move the Control Switch to the Program mode (PRG).
2. Enter [5500] + the [Amt Tend/TOTAL] key.

TAX TABLE (AN ALTERNATIVE FOR USING THE FIXED PERCENTAGE TAX RATE)

If you wish to assign a state tax table rate (instead of a fixed percentage), a series of codes must be used. These codes are derived from an approved state tax table chart. If your state's tax rate is not listed in Appendix I, refer to Appendix II for instructions on calculating your own state's tax table code.

TO PROGRAM A SINGLE TAX TABLE RATE

"PRG" + (State Tax Table Code) + (Tax Shift)

Repeat as needed for each code

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the [CHARGE] key now. If not, continue with Step #2.
2. **Type each tax table code** followed by the **[TAX SHIFT]** key.

Example: The tax code for Arizona 4% is: 121-240096-13-19-23-27-27-1029-25-25-25-1025.

1. **Move the Control Switch to the "PRG" position.**
2. **Enter [121] + the [TAX SHIFT] key.**
3. **Enter [240096] + the [TAX SHIFT] key.**
4. **Enter [13] + the [TAX SHIFT] key.**
5. **Enter [19] + the [TAX SHIFT] key.**
6. **Continue entering the tax codes and press the [TAX SHIFT] key after each code until finished.**

3. Continue with other programming or move the Control Switch out of the Program position.

PRICE LOOK UP (PLU)

A total of 99 Price Look Up codes (PLUs) are available on this cash register. The Price Look Up system allows for fast, accurate entry of an item and automatically records the number of items sold. There are 2 methods in programming PLUs. One method is to set the PLU number with a preset price known as a Fixed PLU Price. The second method is to set the PLU without a preset price, where you are able to manually enter the price of an item while still having the sales activity recorded under the PLU number on management reports, known as an Open PLU Price (sub-department). The Open PLU Price is recommended for items whose prices change frequently.

Before getting started with programming PLUs, the following 3 steps should be done:

1. Make a list of the PLU numbers and their prices you wish to program.
2. Decide whether you want the PLU number designated as a Fixed PLU Price or an Open PLU Price. **Note: The Fixed PLU Price does not allow you to override or change a preset price in the register mode, whereas the Open PLU Price does.**
3. Determine if each PLU number requires tax or no tax. If tax is required for a particular PLU number, be sure to link the PLU number to a department that is programmed for tax. Likewise, if a PLU number does not require tax, then link the PLU number to a department not programmed for tax.

Program PLU Status

Note: This procedure should only be done if you are interested in the Open PLU Price (sub-department) option. Otherwise, proceed to the next section on Programming PLU Prices.

1. Enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.
2. Press the **[PO]** key to begin programming the PLU Status.
3. Type the **[PLU # (between 01-99)]**, press the **[PLU]** key, type the **[PLU Status #]** and press the **[Department]** key.

   PLU Status **0** = Fixed PLU Price (This is the factory default option).
   PLU Status **1** = Open PLU Price (Sub-department option).

4. Repeat Step #3 for all desired PLU numbers.
5. Press the **[PO]** key to finish programming the PLU Status.
6. Continue to the next section on programming the PLU Price.

Program PLU Prices

1. Enter the Program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.
2. Press the **[QTY/TIME]** key to begin programming.
3. Type the **[PLU Number (between 01-99)]**, press the **[PLU]** key, type the **[PLU Price]** and press the **[Department]** key.
4. Repeat Step #3 for all desired PLU numbers. **Note: When programming PLU numbers consecutively, it is not necessary to type the PLU number each time. The system automatically prompts you with the next PLU number**.
5. Press the **[QTY/TIME]** key to finish programming PLU prices.

CONFIRMATION REPORTS: No printing will occur during programming of PLUs. To print a PLU Confirmation Report, turn to the next page.

PLU CONFIRMATION REPORT

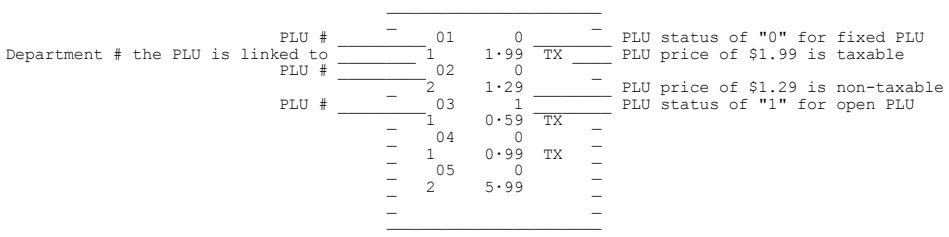
To print a PLU Confirmation Report

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.

2. Press the **[PLU]** key. The PLUs programmed will print. See sample printout below.

3. Continue with other programming or move the Control Switch out of the "PRG" position.

PLU Confirmation Report


PLU # 01 0 PLU status of "0" for fixed PLU
Department # the PLU is linked to 1 1·99 TX PLU price of $1.99 is taxable
PLU # 02 0
2 1·29 PLU price of $1.29 is non-taxable
PLU # 03 1 PLU status of "1" for open PLU
1 0·59 TX
04 0
1 0·99 TX
05 0
2 5·99

SETTING THE SECURITY CODE AND DECIMAL POINT

SECURITY CODE: For Program and Management Report Protection

Management Reports can be printed in either the "X" or "Z" positions on the Control Switch. When printed in the "Z" position, transaction totals are reset to zero. Assigning a security code can prevent accidental reset of transaction totals. Once assigned, the "Z" report prints ONLY after entering the security code.

NOTE: Assign a number easily remembered. You should also keep the program receipt as a reminder. If you do forget the code, reset this program with a new code. Then, print the report using the new code.

Assigning a Security Code:

1. If necessary, enter the program mode. (Move the Control Switch to the "PRG" position).
2. **Type (the numbers) representing the security code. (Up to four digits can be used).**
3. Press the **[CHARGE]** key to store the code.

Example: Assign a security code of "7748":

Type/Press:	The Display Shows:	The Receipt Shows:
7748 + [CHARGE]	77.48	77.48 CH

NOTE: IF YOU SET A SECURITY CODE, YOU WILL NOT BE ABLE TO ALTER YOUR PROGRAM OR PRINT YOUR MANAGEMENT REPORTS UNTIL YOUR SECURITY CODE HAS BEEN ENTERED. THE PROMPT "SEC CODE" WILL APPEAR IN THE DISPLAY TO REMIND YOU TO ENTER THE CODE. TO DELETE A SECURITY CODE NUMBER: ENTER THE PROGRAM MODE, TYPE [0] [0] [0] [0] AND PRESS THE [CHARGE] KEY.

Using a Security Code in the Program Mode:

1. In the "PRG" mode, enter the 4-digit code and press the **[CHARGE]** key. Proceed with programming.

Using a Security Code in the "Z" Mode:

1. To print a "Z" report when a security code has been assigned, in the "Z" mode, enter the 4-digit code and press the **[Amt Tend/TOTAL]** key.
2. The "Z" report will print.

SETTING THE DECIMAL POINT

To set 2 decimal place (standard in the U.S.):

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.
2. Type the numbers **[1]**, **[2]**, followed by the **[RA]** key.
3. If finished with programming, move the Control Switch out of the "PRG" position.

THE SAME PROCEDURES APPLY FOR OTHER DECIMAL SETTINGS AS FOLLOWS:

[1] + [0] + [RA] = 0.
[1] + [1] + [RA] = 0.0
[1] + [2] + [RA] = 0.00 Standard setting for U.S.
[1] + [3] + [RA] = 0.000

SETTING THE EURO CONVERSION FEATURE

CONVERSION FEATURE: Useful along Border States for currency conversion

The Euro Conversion feature provides a automatic method of currency conversion. It establishes one currency as the Local currency and another currency as the converted currency. Once the rate is established, it will remain the rate unless changed. This feature does not use a daily exchange rate but is established through the following programming steps. The rate can be changed as frequently as one would want to change the rate, either daily, weekly, monthly or annually.

There are a few steps to set up the Euro Conversion feature.

- Activate/Disable the System
- Print the Currencies to be printed
- Establish the Local/Euro Currency as Standard
- Setting the Conversion Rates

Activate/Disable the Euro Conversion Feature:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[7]**
3. Enter either **[0]** or **[1]** [0] disables the feature; [1] activates the feature.
4. Press the **[RA/Euro]** key to finish.

Print the Currencies to Be Printed:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[9]**
3. Enter either **[0]** or **[1]** [0] print both currencies; [1] print only tendered currency.
4. Press the **[RA/Euro]** key to finish.

Establish the Local/Euro Currency as Standard:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[10]**
3. Enter either **[0]** or **[1]** [0] = Local; [1] Euro.
4. Press the **[RA/Euro]** key to finish.

Setting the Conversion Rates:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[0 - 8]** 0-8 is the number of decimal places for the local currency
3. Type [0-8] 0-8 is the number of decimal places for the Euro currency
4. Type [0.00000001 - 999999] this is the rate of conversion. See example below.
5. Press the **[VOID]** key to finish.

In the above step you establish the rate of the local currency and the rate of the converted currency. For instance, for use along US/Canadian borders, the local currency is US dollars (USD) and the converted currency is Canadian dollars (CND); the conversion rate might be 1 USD = 1.5 CND. To program this example, enter:

1 (for USD) 2 (for CND) 000015 (for conversion rate) [VOID]

SUMMARY OF PROGRAMS

Listed below is a recap of all programs set according to the examples used in this section:

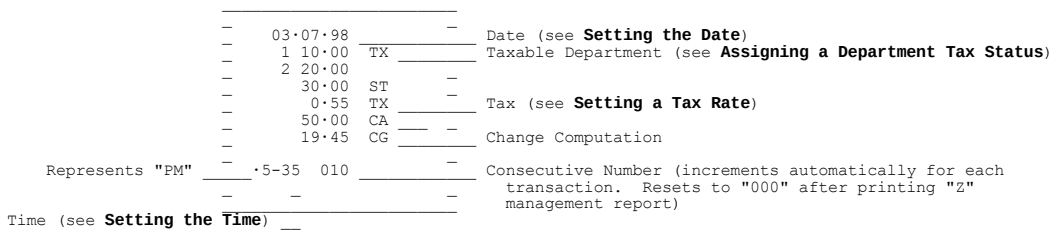
Program/Example	Type/Press	Sample Receipt
SET CONTROL SWITCH TO "PRG"		
SET DATE: MARCH 7, 1998	(030798) + [#/NS]	03·07·98
		15·30
SET TIME: 3:30 PM	(1530) + [QTY/TIME]	5·00 %-
		001 CK
SET -% RATE: 5%	(500) + [-%]	1 0·00 TX
		000
ASSIGN TAX STATUS:		2 0·00
DEPT 1 - TAXABLE	(0) + (01) + [CHECK] + (0) + [DEPARTMENT 1]	0·01 TX
DEPT 2 - NO TAX	(0) + (00) + [CHECK] + (0) + [DEPARTMENT 2]	55·00 TX
		77·48 CH
SET FIXED TAX: 5.5%	(5500) + [AMT TEND/TOTAL]	
ASSIGN A SECURITY CODE: 7748	(7748) + [CHARGE]	

TRANSACTION EXAMPLES

The examples in this section show how to complete different type of transactions. Sample receipts are included that reflect the program examples used in setting **THE REGISTER PROGRAMS**.

SAMPLE RECEIPT

The following sample shows where general transaction information is printed on a receipt and what program options must be set to print the appropriate options. (See **THE REGISTER PROGRAMS** for specific instructions).


03·07·98 Date (see Setting the Date)
1 10·00 TX Taxable Department (see Assigning a Department Tax Status)
2 20·00
30·00 ST
0·55 TX Tax (see Setting a Tax Rate)
50·00 CA
19·45 CG Change Computation
Represents "PM" ·5-35 010 Consecutive Number (increments automatically for each transaction. Resets to "000" after printing "Z" management report)
Time (see Setting the Time)

TRANSACTION SYMBOLS

The following symbols appear on the paper tape. They are printed to the right of entries to identify various totals and transaction operations. Some of these symbols also appear on the management report. They include:

CA - Cash Transaction Total
CH - Charge Transaction Total
CA - Amount Tendered
ST - Subtotal, Excluding Tax
CG - Change
% - Percent Discount Applied To An Item Or Sale
- - Coupon / Discount / Refund Or Void
X - Quantity Being Multiplied
@ - Item Price Being Multiplied
VD - Voided Previous Entry
RF - Refund Or Return (Management Report Only)
- Identification Number
NS - No Sale Receipt
CL - Clerk
TS - Tax shift

TRANSACTION EXAMPLES

STANDARD TRANSACTIONS

Registering a Single Item Sale and Tendering Change

NOTE: Up to 7 digits can be used for the amount of the entry.

Example: Register a $1.00 item in Department 1 (programmed at 5.5% fixed tax rate). Subtotal transaction and compute change for $5.00.

1. **[100] + [DEPARTMENT 1]**
2. **[SUBTOTAL]**
3. **[500] + [Amt Tend/TOTAL]**

```
1    1·00     TX
     1·00     ST
     0·06     TX
     5·00     AT
     3·94     CG
·5-35  010
```

Registering a Sale to Multiple Items

NOTE: Up to two digits can be used for the quantity multiplied.

Example: Multiply two items times $1.50 to Department 1.

1. **[2] + [QTY/TIME] + [150] + [DEPARTMENT 1]**
2. **[SUBTOTAL]**
3. **[Amt Tend/TOTAL]**

```
     2·       X
     1·50     @
1    3·00     TX
     3·00     ST
      ·17     TX
     3·17     CA
·5-36  011
```

Registering a Charge Transaction

NOTE: Charge transactions are counted and registered to the charge total in the financial report.

Example: Register a $2.50 item to Department 1 and a $3.00 item to Department 2 as a charge transaction.

1. **[250] + [DEPARTMENT 1]**
2. **[300] + [DEPARTMENT 2]**
3. **[CHARGE]**

```
03·07·98

1    2·50     TX
2    3·00
     0·14     TX
     5·64     CH
·5-37  012
```

TRANSACTION EXAMPLES

Using Split Tendering

Example: Register a $10.00 item and a $15.00 item to Department 2; split the total between $20.00 cash and $5.00 charge.

1. **[1000]** + **[DEPARTMENT 2]**
2. **[1500]** + **[DEPARTMENT 2]**
3. **[SUBTOTAL]**
4. **[2000]** + **[Amt Tend/TOTAL]** + **[CHARGE]**

```
2   10·00
2   15·00
    25·00      ST
    20·00      CA
     5·00      CH
·5-38  013
```

MINUS (-) KEY TRANSACTIONS

Registering a [-] Reduction:

NOTE: Up to 7 digits can be used for the amount of the reduction.

Example: Register a 10¢ reduction (coupon) on a $2.00 item to Department 2.

1. **[200]** + **[DEPARTMENT 2]**
2. **[10]** + **[Ref/-]**
3. **[Amt Tend/TOTAL]**

```
2    2·00
    -0·10
     1·90      CA
·5-39  014
```

TRANSACTION EXAMPLES

PERCENT DISCOUNT (-%) TRANSACTIONS

Discounting [-%] Individual Items

NOTE: Up to four digits can be used for the discount percentage (0-99.99%). You **MUST** enter two digits after the decimal position.

Example: Register a 10% discount to a transaction.

1.	**[100] + [DEPARTMENT 1]**	1 1·00 TX
		10·00 %
2.	**[1000] + [-%]**	-0·10 -
		·90 ST
3.	**[SUBTOTAL]**	0·05 TX
		0·95 CA
4.	**[Amt Tend/TOTAL]**	·5-40 016

Using a Preset Discount (-%) On The Total Sale:

Example: Register the preset percent discount (5%) to an entire transaction.

1.	**[100] + [DEPARTMENT 1]**	1 1·00 TX
		1 2·00 TX
2.	**[200] + [DEPARTMENT 1]**	3·00 ST
		5·00 %
3.	**[SUBTOTAL]**	-0·15 -
		0·16 TX
4.	**[-%]**	3·01 CA
		·5-41 017
5.	**[Amt Tend/TOTAL]**	

Using a Preset Discount (-%) on Individual Items:

Example: Register the preset percent discount (5%) on a $3.00 item to Department 2.

1.	**[300] + [DEPARTMENT 2]**	2 3·00
		5·00 %
2.	**[-%]**	-0·15 -
		2·85 CA
3.	**[Amt Tend/TOTAL]**	·5-42 019

Overriding the Preset Discount (-%]:

Example: Register a 15% discount (to override preset 5%] on a $10.00 item to Department 2. NOTE: You **MUST** enter two digits after the decimal position.

		·1·
1.	**[1000] + [DEPARTMENT 2]**	2 10·00
		15·00 %
2.	**[1500] + [-%]**	-1·50 -
		8·50 CA
3.	**[Amt Tend/TOTAL]**	·5-43 020

TRANSACTION EXAMPLES

PLU CODES

Note: PLU Codes must be preset to use this feature. See The Register Programs to assign PLU information.

Using a Fixed PLU Price:

Example: Register PLU #1 programmed at the preset price of $1.50:

1.	**[1]** + **[PLU]**	01 1·50 TX
		1·50 ST
2.	**[SUBTOTAL]**	0·08 TX
		1·58 CA
3.	**[Amt Tend/TOTAL]**	·5-30 036

Using an Open PLU Price (Sub-department):

Example: Register the price of $2.00 in PLU #3:

1.	**[3]** + **[PLU]**	03 2·00 TX
		2·00 ST
2.	**[200]** + **[PLU]**	0·10 TX
		2·10 CA
3.	**[SUBTOTAL]** + **[Amt Tend/TOTAL]**	·5-30 037

Using an Open PLU Price (Sub-department) with a Preset Price:

Example: Register PLU #3 programmed with the preset price of $10.00:

1.	**[3]** + **[PLU]**	
		03 10·00 TX
2.	**[PLU]**	10·00 ST
		0·50 TX
3.	**[SUBTOTAL]** + **[Amt Tend/TOTAL]**	10·50 CA
		·5-30 038

VOIDS AND REFUNDS

Voiding the Previous Entry in the Middle of a Sale:

Example: Void a $2.00 entry to Department 2 made in error. Then register a $3.00 item in Department 2.

1. **[200]** + **[DEPARTMENT 2]**
2. **[VOID]**
3. **[300]** + **[DEPARTMENT 2]**
4. **[Amt Tend/TOTAL]**

```
2    2·00TX
2   -2·00VD
2    3·00
     3·00CA
```

NOTE: To void an earlier entry or entire transaction, complete the transaction then follow the directions for a void.

Voiding a Single Item:

Example: Void a $1.00 item in Department 1.

1. **[VOID]**
2. **[100]** + **[DEPARTMENT 1]**
3. **[Amt Tend/TOTAL]**

```
1   -1·00VD
    -0·06TX
    -1·06CA
·5-45  023
```

Voiding Multiple Items:

Example: Void a $1.00 item in Department 1 and a $2.00 item in Department 2.

1. **[VOID]**
2. **[100]** + **[DEPARTMENT 1]**
3. **[VOID]**
4. **[200]** + **[DEPARTMENT 2]**
5. **[Amt Tend/TOTAL]**

```
1   -1·00VD
2   -2·00VD
    -0·05TX
    -3·05CA
·4-23  021
```

TRANSACTION EXAMPLES

REFUNDS

Refund a Single Item:

Example: Refund a $1.00 item in Department 1.

1. **[Ref/-]**
2. **(100)** + **[DEPT 1]**
3. **[Amt Tend/TOTAL]**

```
1   -1·00TX
    -0·05TX
    -1·05CA
·4-31  023
```

Refund Multiple Items:

Example: Refund a $1.00 item in Department 1 and a $2.00 item in Department 2.

1. **[Ref/-]**
2. **(100)** + **[DEPT 1]**
3. **[Ref/-]**
4. **(200)** + **[DEPT 2]**
5. **[Amt Tend/TOTAL]**

```
1   -1·00TX
2   -2·00
    -0·05TX
    -3·05CA
·4-31  024
```

Example: Refund 3 items at $1.00 in Department 1.

1. **[Ref/-]**
2. **(3)** + **[QTY/TIME]**
3. **(100)** + **[DEPT 1]**
4. **[Amt Tend/TOTAL]**

```
    3·X
 1·00@
1   -3·00TX
    -0·17TX
    -3·17CA
·3-45  015
```

TAX OVERRIDE TRANSACTIONS

Exempting Tax on an Item:

NOTE: Use this procedure to exempt an item from being taxed when registered to a taxable department.

Example: Exempt tax from a $2.00 item to Department 1 (preset at 5.5% fixed tax rate - 1).

1. **[TAX SHIFT]** + **[200]** + **[DEPARTMENT 1]**
2. **[100]** + **[DEPARTMENT 1]**
3. **[Amt Tend/TOTAL]**

```
1    2·00
     1·00TX
     0·06TX
     3·06CA
·5-45  024
```

Exempting Tax on an Entire Sale:

Example: Exempt tax on the entire sale registered to Department 1 (preset at 5.5% fixed tax rate).

1. **[300]** + **[DEPARTMENT 1]**
2. **[500]** + **[DEPARTMENT 1]**
3. **[TAX SHIFT]**
4. **[Amt Tend/TOTAL]**

```
1    3·00TX
1    5·00TX
     8·00CA
·5-45  025
```

Adding Tax to a Non Taxed Department:

Example: Add the TX 1 preset rate (5.5% fixed tax rate) to a $1.00 item registered to Department 2 (preset as non taxable).

1. **[TAX SHIFT]** + **[100]** + **[DEPARTMENT 2]**
2. **[Amt Tend/TOTAL]**

```
2    1·00TX
     0·06TX
     1·06CA
·5-46  026
```

TRANSACTION EXAMPLES

OTHER TRANSACTIONS

Registering Money Received On Account:

Example: Register $10.00 received on account.

1. **[1000]** + **[RA]**

10·00RA
·5-46 027

Paying Money Out:

Example: Pay out $5.00.

1. **[500]** + **[PO]**

-5·00PO
·5-46 028

Registering an Identification Number:

NOTE: Up to 7 digits can be used for the identification number. This entry can be made prior to any operation. The # identification is not added to the management report or totals.

Example: Assign the ID number "12345" to a transaction.

1. **[12345]** + **[#/NS]**

12345 #

2. **[100]** + **[DEPARTMENT 1]**

1·00TX
0·06TX
1·06CA

3. **[Amt Tend/TOTAL]**

·5-47 029

Registering a No Sale:

NOTE: This operation simply prints a no sale receipt. An activity is registered to the activity counter in the management report.

1. [#/NS]

NS
·5-48 030

"X" AND "Z" SALES MANAGEMENT REPORTS

Transaction data is maintained in the memory of the cash register as long as the battery back-up system is in effect. This data can be printed as a report for management review.

The Management Report can be printed from either the "X" or the "Z" position on the Control Switch.

"X" POSITION REPORT (Refers to a mid-day reading)

The "X" position report prints the accumulated information and RETAINS ALL TOTALS IN MEMORY. Use this position to print periodic readings of transaction information. (Some users call the X-report a mid-day report).

"Z" POSITION REPORT (Refers to an end-of-day or close-out reading)

The "Z" position report prints the same information as the "X" report. However, once this report is printed, ALL TRANSACTION TOTALS ARE RESET TO ZERO except the grand total. (Some users call the Z-report an end-of-day report).

NOTE: To prevent accidental printing of the "Z" report, set the security code as explained in the SECURITY CODE section. Once this code is set, a "Z" report will not print until the security code is entered. If a "Z" report is attempted without entering the security code, the prompt "SEC Code" will appear in the display.

PRINTING THE SALES REPORT

IMPORTANT: Once a "Z" reading is taken, it cannot be duplicated, so be sure to have plenty of paper in the register.

1. Set the Control Switch to either the **"X"** or **"Z"** position.

2. Press the **[Amt Tend/TOTAL]** key.

NOTE: If a security code has been assigned, be sure to enter the security code before pressing the [Amt Tend/TOTAL] key.

TO CLEAR THE GRAND TOTAL:

1. Set the Control Switch to the **"PRG"** (Program Mode) position.

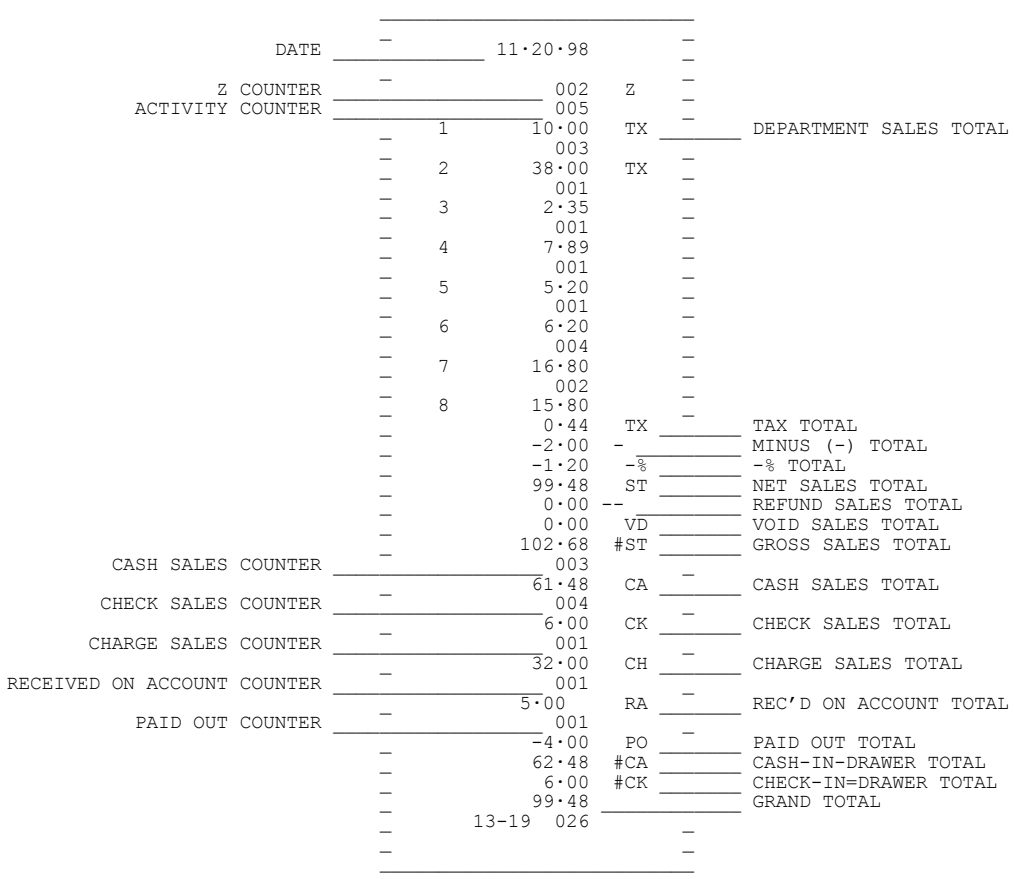
Note: If a security code has been assigned, enter the # and press the [CHARGE] key. If not, continue with Step 2.

2. Type **[2]**, type **[0]**, then press **[RA]**.

After this operation, the grand total reverts to zero.

SAMPLE MANAGEMENT REPORT

The Management Report provides the following information as shown in the sample below:



BALANCING FORMULAS

The following examples illustrate how totals are calculated for the management reports:

System Balance:

(+) DEPARTMENT 1
(+) DEPARTMENT 2
(+) DEPARTMENT 3
(+) DEPARTMENT 4
(+) DEPARTMENT 5
(+) DEPARTMENT 6
(+) DEPARTMENT 7
(+) DEPARTMENT 8
(-) MINUS TOTAL
(-) -% TOTAL
(+) TAX TOTAL

(=) NET SALES

(+) NET SALES
(+) MINUS SALES
(+) -% TOTAL
(+) RETURN TOTAL
(+) VOID TOTAL

(=) GROSS SALES

(+) NET SALES
(+) PREVIOUS GRAND TOTAL

(=) ENDING GRAND TOTAL

Media Balance:

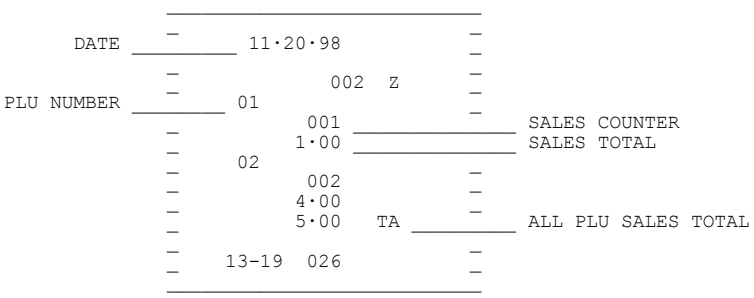
(+) NET SALES
(-) CHECK
(-) CHARGE
(+) RECEIVED ON ACCOUNT
(-) PAID OUT
(-) PAYMENTS OUT

(=) CASH IN DRAWER

PLU REPORT

PLU Reports can be taken in either the X or Z position. Remember, if the PLU Report is taken in the Z position, the total will be reset to zero.

1. Move the Control Switch to the **"X"** or **"Z"** position as desired.
2. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been programmed, continue with Step #3.
3. Press the **[PLU]** key.
4. The PLU Report will print.



TROUBLESHOOTING

In case of operational difficulty:

1. Be sure the unit is plugged into a working electrical outlet and no other electrical device is using the same power source. Another electrical motor on the same circuit could cause interference with register operations.

2. Check that the Control Switch is set to the proper position.

3. Review the operating instructions to be sure the transactions have been performed as described in this instruction manual.

4. If you are in the Program (PRG) or "Z" modes and the error tone sounds and the prompt "SEC Code" appears in the display, this means a manager's security code was programmed. See page 25 for further information.

5. If the register still does not function, use the Full System Clear Procedure:

   CAUTION: The Full System Clear Procedure erases all transaction data AND all programs from the memory.

   A. Turn the side switch to the "Off" position.

   B. Remove the top battery and unplug the register for at least 20 minutes. (Batteries are located in the journal compartment.)

   C. Plug the register back in and replace the battery.

   D. Reprogram the register.

6. If you cannot resolve your difficulty using the previous four steps, feel free to call the Office Zone Customer Service at 1-800-543-5454.

TAX SYSTEM PRESET

In addition to the USA tax mode of ADD-ON TAX which is the standard factory setting for this register, two other tax systems are available as follows:

1. **Canadian Tax System** - Special tax programming for the taxation system in Canada.

2. **VAT (Value Added Tax)** - which means that the tax amount is included in the price of the item. This tax system is most commonly used in European countries.

The tax system is set as follows:

Tax Status Number

Default = 0 USA Tax Mode - Standard Setting for U.S. tax
1 Canadian Tax Mode
2 VAT Tax Mode - Commonly used in European Countries

"PRG" + [3] + [Tax Status Number] + [RA]
1 digit #

1. Enter the Program Mode: Move the Control Switch to the **"PRG"** position. If a security code has been assigned, enter the # and press the **[CHARGE]** key now. If not, continue with Step #2.

2. Type **[3]**, then type the setting number for the tax system desired: **0 = USA Tax; 1 = Canadian Tax; 2 = VAT Tax.**

For USA tax programming, please see Page 21. For VAT tax programming, please see Page 43. For Canadian tax, see Page 44.

Tax Status Number	Condition
00	Non-Taxable
01	Taxable by Tax 1
02	Taxable by Tax 2
03	Taxable by Tax 3
04	Taxable by Tax 4
05	Taxable by Tax 1 and Tax 2
06	Taxable by Tax 1 and Tax 3
07	Taxable by Tax 1 and Tax 4
08	Taxable by Tax 2 and Tax 3
09	Taxable by Tax 2 and Tax 4
10	Taxable by Tax 3 and Tax 4
11	Taxable by Tax 1, Tax 2 and Tax 3
12	Taxable by Tax 1, Tax 2 and Tax 4
13	Taxable by Tax 1, Tax 3 and Tax 4
14	Taxable by Tax 2, Tax 3 and Tax 4
15	Taxable by Tax 1, Tax 2, Tax 3 and Tax 4

VAT TAX SYSTEM

The VAT tax system, which stands for Value Added Tax, is most commonly used in European Countries. With VAT tax, the tax amount is already included in the price of the item, yet the tax amount will print on the receipt. Up to 4 VAT tax rates can be programmed.

To choose the VAT Tax System, please complete the following:

a.Enter the Program Mode: Move the Control Switch to the **"PRG"** position. If a security code has been assigned, enter the # and press the **[CHARGE]** key now. If not, continue with Step #1.

Step 1: Type **[3]**, type **[2]**, then press the **[RA]** key.

Step 2: Program the VAT Tax Rate as follows:

[TAX #] + [TAX SHIFT] + [TAX RATE] + [AMT TEND/TOTAL]
1-4 0 - 99.999%

Example: Program a VAT Tax 1 rate as 15%:

1. If needed, enter the Program Mode: Move the Control Switch to the **"PRG"** position. If a security code has been assigned, enter the # and press the **[CHARGE]** key now. If not, continue with Step #2.

2. Type **[1]**, press **[TAX SHIFT]**, type the tax rate as **[15000]**, then press **[Amt Tend/TOTAL]**.

CANADIAN TAX SYSTEM

To choose the Canadian Tax System, please complete the following:

1. Enter the Program Mode: Move the Control Switch to the **"PRG"** position. If a security code has been assigned, enter the # and press the **[CHARGE]** key now. If not, continue with Step 2.

2. Type **[3]**, type **[1]**, then press the **[RA]** key.

3. Program the Tax Rate as follows:

TAX # + [TAX SHIFT] + [(NON-TAXABLE LIMIT PRICE*) + (REF/-)] + [TAX RATE] + [AMT TEND/TOTAL]		
1-4	Maximum 6 Digits	0 - 99.999%

* The non-taxable limit is used in certain areas where tax is exempted below a certain amount, for example, any amount below $4.00* is exempt from PST tax. If there is no non-taxable limit, simply skip this step in brackets in the procedure above.

CANADIAN TAX - METHOD #1

GST Tax: 7%
PST Tax: 8%
GST/PST Tax: Both 7% and 8% calculated on the net amount

1. Program Tax 1 as 7%:

[1] + [TAX SHIFT] + [7000] + [AMT TEND/TOTAL]

2. Program Tax 2 as 8%:

[2] + [TAX SHIFT] + [8000] + [AMT TEND/TOTAL]

3. Link Tax 1 (7% GST) to the desired Department key:

[001] + [CHECK] + 0 + [DEPARTMENT KEY]

4. Link Tax 2 (8% PST) to the desired Department key:

[002] + [CHECK] + 0 + [DEPARTMENT KEY]

5. Link both Tax 1 (7% GST) and Tax 2 (8% PST) to the desired Department key:

[005] + [CHECK] + 0 + [DEPARTMENT KEY]

CANADIAN TAX - METHOD 2

GST Tax: 7%
PST Tax: 8%
GST/PST Tax: Both 7% and 8% calculated as tax on tax (piggyback calculation)

For the Canadian tax system of TAX on TAX:

Type **[5]**, type **[1]**, then press the **[RA]** key.

1. Program Tax 1 as 7%:

[1] + [TAX SHIFT] + [7000] + [AMT TEND/TOTAL]

2. Program Tax 2 as 8%:

[2] + [TAX SHIFT] + [8000] + [AMT TEND/TOTAL]

3. Program Tax 3 as 8%:

[3] + [TAX SHIFT] + [8000] + [AMT TEND/TOTAL]

4. Link Tax 1 (7% GST) to the desired Department key:

[001] + [CHECK] + 0 + [DEPARTMENT KEY]

5. Link Tax 3 (8% PST) to the desired Department key:

[003] + [CHECK] + 0 + [DEPARTMENT KEY]

6. Link both Tax 1 (GST) and Tax 2 (PST) to the desired Department key:

[005] + [CHECK] + 0 + [DEPARTMENT KEY]

7. Program for tax on tax calculation (piggyback):

[9] + [1] + [RA]

For customer assistance call 1-800-543-5454.

CALCULATING STATE TAX TABLE CODES

"EXAMPLE TAX CHART"

STEP C: Enter the base tax amount (the minimum point where no tax is charged) followed by the Number "1". Then **press** the **[TAX SHIFT)** key.

STEP D: Enter the 6 digit number (see Page II-b) (i.e. 4% = 240096).

STEP E: Enter the individual "Irregular" breakpoint pattern. **Press** the **[TAX SHIFT)** key after each breakpoint. Place the number "10" before the last "Irregular" breakpoint. (13, 19, 23, 27, 27, 1029)

STEP F: Enter the individual breakpoints of the "Regular" breakpoint pattern. **Press** the **[TAX SHIFT)** key after each breakpoint. Place the number "10" before the last "Regular" breakpoint. (25, 25, 25, 1025)

STEP G: To summarize, combine the Steps A through F and maintain the information for future use.

121 [TAX SHIFT)
240096 [TAX SHIFT)
13 [TAX SHIFT)
19 [TAX SHIFT)
23 [TAX SHIFT)
27 [TAX SHIFT)
27 [TAX SHIFT)
1029 [TAX SHIFT)
25 [TAX SHIFT)
25 [TAX SHIFT)
25 [TAX SHIFT)
1025 [TAX SHIFT)

STEP A

STEP B Breakpoints	SALE AMOUNT from	SALE AMOUNT to	TAX AMOUNT
13	0	12	0
19	13	31	1
23	32	54	2
27	55	81	3
27	82	108	4
29	109	137	5
25	138	162	6
25	163	187	7
25	188	212	8
25	213	237	9
	238		10

NOTE: A total of 63 breakpoints can be programmed on this cash register.

OfficeZone www.officezone.com 1-800-543-5454

"THE WORKSHEET"

Write down your results as you go.

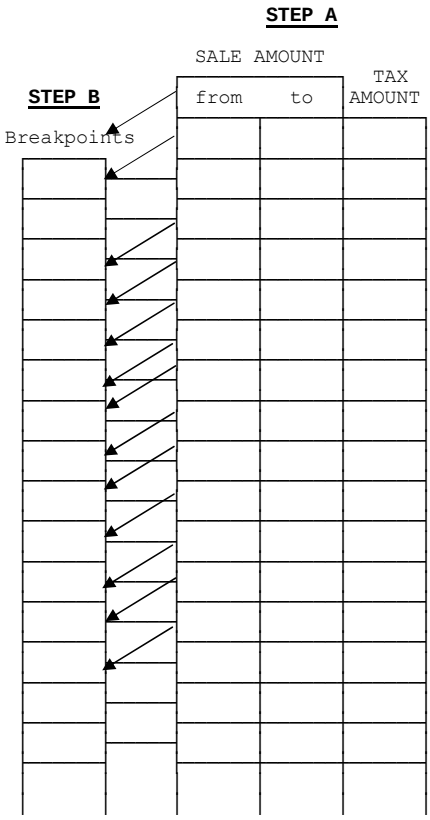
STEP C:

STEP D:

STEP E:

STEP F:

STEP G:



ROYAL®

130cx

Cash Management System

Instruction Manual

16 Departments / 200 PLUs
8 Clerk Totals
Automatic Tax Computation
4 Tax Tables
Currency Conversion
Security Features

Programmable Electronic Cash Register

Easy Set-Up Instructions
see page 12

WELCOME...

to the Royal family of fine business machines.
We sincerely hope you will enjoy the many benefits
of being associated with a distinguished product
name that has represented both quality and
customer satisfaction since 1905.

This electronic cash register is designed to help your business function smoothly by providing efficient register operations and accurate management reports. Start-up is quick and easy, yet there are many options that can be added and revised so that you can customize your operations for optimum productivity. Here are just a few of the register's many valuable features:

- 16 departments and 200 PLU settings
- 8 Clerk Totals
- Rear Customer Display
- Security system
- Choice of Journal or Customer Receipt printout
- Automatic tax computation for tax rate (Canadian Tax and VAT - 4 Rates)
- Up to 4 Tax Tables
- Currency Conversion
- Department-linked entry options that streamline and speed-up operation
- Periodic management reporting systems
- Battery back-up / memory protection of records

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APPENDIX 1: CALCULATING STATE TAX TABLE CODES....49

INTRODUCING ... YOUR CASH REGISTER

STANDARD ACCESSORIES

The following are included in the box with your cash register:

- 1 black, plastic journal winder spindle
- 1 roll of standard paper tape
- 1 ink roll (already installed)
- 4 standard "AA" batteries for battery back-up system
- 2 Cash Drawer / Journal Lock keys
- Instruction Manual
- Quick Start Sheet

USING THIS MANUAL

Your Cash Register manual is organized for easy reference. The front portion contains general information on all features and functions of the cash register. Instructions for setting the optional programs are next. Transaction examples for operating the register are at the back of the manual. Use the **TABLE OF CONTENTS** to locate a particular item.

Throughout this manual, references to the keypad are shown bolded and in brackets. References to the operational keys are preceded by the word "press". For example: Press [SUBTOTAL]. Or: Press [DEPARTMENT 1]. References to the numeric keypad are preceded by the word "type". For example: Type the number [1].

GETTING STARTED

Important note: The cash register must be first plugged in before installing the back-up batteries.

Before you begin to operate the register or set the programs, check **SETTING UP AND MAINTAINING THE CASH REGISTER** for installation information. Review **KEYPAD FUNCTIONS, THE CONTROL SYSTEM** and **THE DISPLAY** to become familiar with their operations.

NOTE: Programs and transaction information for management reports are stored in the memory of the cash register. The batteries must be installed to save this information.

SETTING THE REGISTER PROGRAM

Transaction examples provide steps for key operations. Sample receipts are included.

Royal's helpful "Quick Start" program (Page 12) will provide you with the most basic programming options for the operation of your new cash register. Many users find "Quick Start" the best way to begin to learn about the many capabilities of the machine.

SPECIFICATIONS AND SAFETY

MODEL:	Royal 130cx (PCUA #14510Y)
TYPE:	Electronic Cash Register
DISPLAY:	LCD Dual. Cashier and Customer. Symbols for error, change, subtotal, minus, total and item count.
CAPACITY:	7 digits input and readout.
PRINTER:	ECR exclusive serial printer.
INK SOURCE:	Black Ink Roll (ROYAL brand PCUA #013109)
PAPER SUPPLY:	57MM (2 1/4" Single-Ply Register Tape (ROYAL brand PCUA 013129)
MEMORY BATTERY PROTECTION:	Approximately 30 days after power interruption.
TECHNOLOGY:	CMOS RAM
POWER CONSUMPTION:	Standby - 15W, Operating - 47W
OPERATING TEMPERATURE:	0-40 Degrees Centigrade (32-104 Degrees Fahrenheit)
DIMENSIONS:	16 3/4" x 12 3/4" x 9"
WEIGHT:	13 lbs.

SAFETY NOTICE

The main outlet for this cash register must be located near the unit and easily accessible.

Do not use this cash register outdoors in the rain or near any source of liquid.

WARNING

"This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference."

SETTING UP AND MAINTAINING THE CASH REGISTER

SETTING UP YOUR CASH REGISTER

IMPORTANT - Please read this section carefully before attempting to operate the cash register or set the programs.

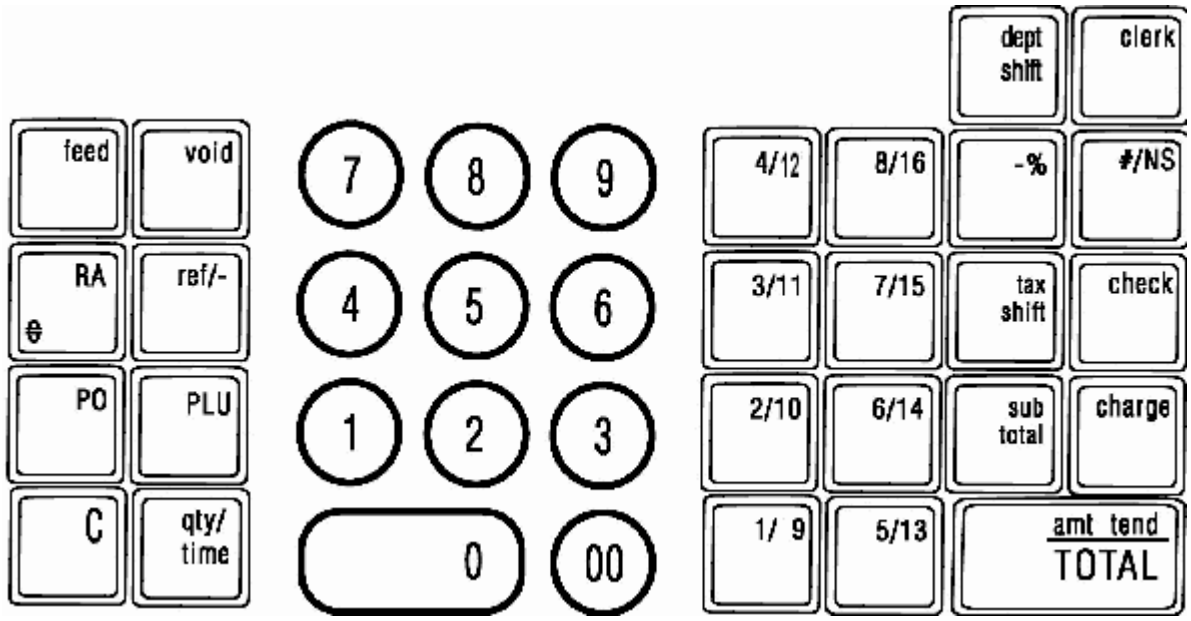
1. Place on a level surface to permit smooth operation of the cash register.
2. Plug in the electrical connection to an appropriate outlet.
3. Install batteries. (See Page 9) Do not install batteries unless the register is plugged in.
4. Install paper. (See Page 10)
5. Set desired program options using Quick Start (Page 12).
6. Set the Control Switch to R1 (journal record) or R2 (customer receipts).
7. The machine is ready for cash register transactions.

MAINTAINING THE CASH REGISTER

- Never cover the cash register when turned on. Doing so will prevent proper cooling of the electronic components.
- Cover the register when not in use to protect components from dust.
- Take care to keep all liquids away from the machine to avoid spills which could damage electronic components.
- To clean, use a soft, dry cloth. Do not apply organic solutions such as alcohol.
- Your cash register should be kept in areas free from dust, dampness or extreme hot or cold temperatures.
- If stored in extreme temperatures (below 32 degrees or above 104 degrees Fahrenheit), allow the temperature inside the register to reach room temperature before turning on.
- DO NOT attempt to pull the paper tape when printing or installing paper. Always use the [Feed] key to advance the paper. Pulling the tape could damage the print mechanism.
- If electronic service is necessary, an authorized service center is recommended.

- Familiarize yourself with the safety statements on Page 2.

KEY PAD FUNCTIONS



1. **Control Lock** - Locks and unlocks the printer cover. In "open" position, it allows access to the journal compartment and management control switches.

2. **[Feed] - Paper Feed Key** - Advances the paper tape with no effect on register entries.

3. **[VOID] Void/Error Correction** - Used to correct an entry after it is printed or to void the previous entry.

4. **[Ref/-] - Dual Function: Coupon** - Subtracts the amount from an item or the sales total, such as a coupon deduction. **Refund** - Subtracts an item that is returned for refund. Minus key totals are shown in the management report.

5. **[RA/EURO] - Received on Account Key** - used to register any money received on account that is not part of a sale; i.e., the start-up money put in the drawer at the start of each business day can be registered as an RA. This key also functions as Euro key for Euro Dollar Conversion.

6. **[PO] - Paid Out** - Registers any money paid out or taken out of the cash drawer that is not part of a sale. Paid out totals appear in the management report.

7. **[PLU] - Price Look Up** - Registers the preset price of an individual item to the appropriate department.

8. **[C] - Clear Entry and Stop Alarm Key** - Clears entries made on the keyboard prior to depressing the registration key. Also stops the error alarm when incorrect entries are made.

9. **[QTY/TIME] - Dual-Function: Multiply, Display Time** - Multiplies [DEPARTMENT], [PLU] or [Ref/-] key entries; also displays the current time, if set.

10. **Department Keys** - Used to select non-taxable and taxable sales at the pre-programmed tax rate.

11. **Numeric Entry Keys**

12. **Dept Shift Key - Used to access departments 9 - 16 for entry of PLUs or transactions.**

13. **Clerk Key - Used to identify associate transaction with a particular clerk. Supports up to 8 Clerks and an optional security code.**

14. **[-%] - Percent Discount Key** - Used to subtract a percentage rate from an individual item or an entire sale. The rate can be a pre-programmed percentage rate or any other manually entered percentage rate.

15. **[#/NS] - Non Add/No Sale Key** - Opens the cash drawer and prints reference data, like driver's license, telephone or social security numbers.

16. **[TAX SHIFT] - Tax Shift Key** - Used to enter a non-tax item into a taxable department or to enter a tax item into a non-taxable department.

17. **[CHECK]** - Total sales paid by check. Check totals appear in the management report.

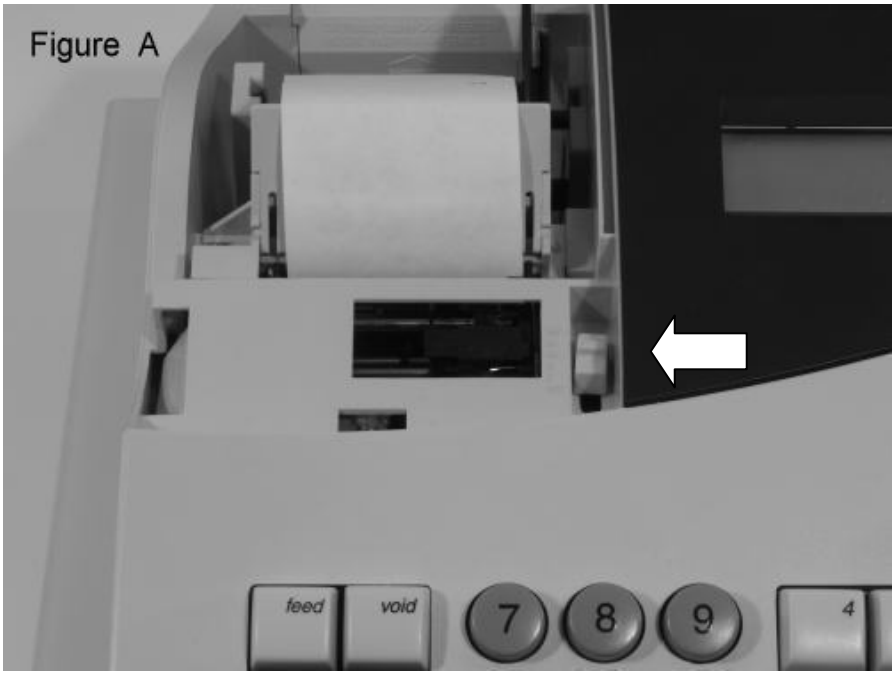
18. **[SUBTOTAL] - Subtotal Key** - Used to obtain a subtotal of all entries with tax added.

19. **[CHARGE] - Charge Key** - Used to total sales that are charged.

20. **[Amt Tend/TOTAL] - Amount Tendered and Cash Total Key** - Used to total transactions, compute change and obtain daily grand totals of all transactions in "X" and "Z" positions.

THE CONTROL SWITCH

The Control Switch (under the Journal Compartment) must be properly positioned to operate the cash register or set the programs. The Control Switch is also used to print or reset the totals for the management report.



Depending on the desired operation, position the Control Switch as follows:

"OFF" - The cash register is turned off and inoperable.

"R1" (On/Journal Tape) - The cash register is set for standard operations, including preset options. A journal record is printed for each transaction.

"R2" (On/Customer Receipt) - The cash register is set for standard operations, including preset options. A customer receipt prints for each transaction.

"X" (Management Report) - Prints the "X" management report.

"Z" (Prints Management Reports and Resets Totals) - Prints the "Z" management report and resets totals (except "locked in" grand total) to zero.

"PRG" (Program Mode) - Used to set and change program settings.

REMOVABLE CASH DRAWER WITH LOCK

The cash drawer will open after completing a cash, check or charge transaction by pressing the [#/NS] key, or by the hidden emergency lever underneath the register.

The cash drawer is electronically locked when the control switch is in the "OFF" position. In addition, the cash drawer is designed with a security lock with key that manually locks the cash drawer and prevents electronically opening it by the [#/NS] key or by the hidden emergency lever underneath the register.

The cash drawer can be completely removed from the register by lifting up on the open drawer and pulling toward you.

READING THE DISPLAY

The display shows entry amounts and related transaction information through use of numbers and special symbols. Display windows are situated both front and back so that operator and customer can simultaneously view the operations.

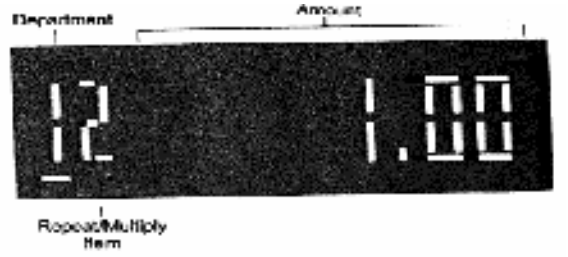
The display is read from left to right as follows.

Department - The first digit displays the department key pressed for each entry.

Repeat/Multiply - The second digit displays when repeating or multiplying items to indicate the number of items entered at one price.

Amount - The remainder of the display shows the entry amount. Up to 7 digits can be used for the amount of each entry.

For example, if you register a $1.00 item to Department 1 and repeated the entry, the display would show:



Special Symbol Indicators

Special symbols appear at the far left of the display during operation of the cash register. These symbols identify the amount shown, warning of an error condition or indicate use of the program mode. They include:

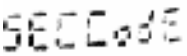
(Change) - Indicates the displayed amount is change due to the customer.

(Minus) - Displays for a negative entry. Also displays if subtotal or cash tendered total is a negative number due to a return or refund.

(Subtotal) - Indicates amount shown is a subtotal, including tax if applicable.

(Total) - Indicates amount shown is the total of the transaction.

(Error) - Displays if an error is made during operation or when setting programs. An error tone sound to alert the operator.



SEC Code - Displays when a security code has been programmed and an entry is attempted in either the Program (PRG) or Z modes.

These symbols clear automatically when you start the next entry or press the **[C]** Clear key.

DISPLAYING THE TIME

Simply press the **[QTY TIME]** key to display the current time. (See **THE REGISTER PROGRAMS** to set the time). The time can be displayed in either a 12 or 24 hour format. (See Page 15). The displayed time is automatically cleared once a transaction is started.

NOTE: Trying to use this feature during a transaction will result in an error tone. If this occurs, press **[C]** to clear the error.

ERROR CONDITIONS

THE ERROR ALARM SYSTEM

The error alarm system warns of an operator error (usually pressing the wrong key for a specific type of entry) or an error when setting a program option. When the error tone sounds, an "E" appears in the display and the keypad locks. An error tone will be played if a cash register function is not programmed.

To clear the "E" error, simply press the [C] Clear key.

NOTE: Moving the Control Switch from "R1" or "R2" to another position before completing a transaction will result in an error condition to remind you to total the transaction.

Clearing an Error:

1. Press the **[C]** Clear key. The tone ends, the display clears and the keypad unlocks.
2. Determine what error was made.
3. Continue with the transaction or restart the program.

NOTE: The **[C]** Clear key also clears an incorrect entry from the display prior to pressing a registration key. Once an entry is printed, the **[VOID]** key must be used to correct an error.

VOIDING ERRORS

Once an entry is printed on the tape, the **[C]** Clear key cannot be correctly used. Use the **[VOID]** key to correct an error just registered.

1. Voiding the Entry Just Completed:

If the transaction has not yet been completed, to erase the entry, simply press the [VOID] key. The entry is reprinted with a "VD" symbol following the amount and erased from the transaction.

2. Voiding an Earlier Entry:

To void an earlier entry:

1. Complete and total the transaction, including the error.
2. Press the [VOID] key.
3. Retype the incorrect information, exactly as originally entered.
4. Total the transaction.

THE BACK-UP BATTERY SYSTEM

During cash register operations, all transaction data for the management report is stored in the register's memory. The memory also holds all the optional program information. The memory back-up system keeps this information stored in memory when the cash register is turned off.

The memory is protected by four standard "AA" (1.5-Volt) batteries that must be installed before programming the register.

This register comes with 4 "AA" batteries which, when properly installed, provide back-up power to the register memory if the power cord is accidentally disconnected or if a power interruption occurs. The daily transactions and locked in grand total will be retained by the machine without (AC) power because of the memory protection feature. Average battery life protection is approximately 30 days after power interruption.

TO INSTALL OR REPLACE BATTERIES:

1. Turn the control key to the "open" position, open the printer cover as described on Page 10 and move the control switch to the "R1 or "R2" position.

2. Remove the battery cover, located at the back of the printer mechanism. (Figure B).

3. Position the batteries as indicated (Figure C) making sure that the positive and negative poles are aligned correctly.

4. Replace the battery cover by sliding down in position. (See Figure D).

5. Close the printer cover.

NOTE: It is important that the unit is plugged in before the batteries are installed.

NOTE: In order to assure continuous battery back-up protection, it is important that the batteries be changed at least once every year.

Figure B

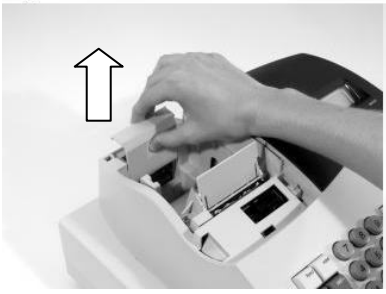


Figure C

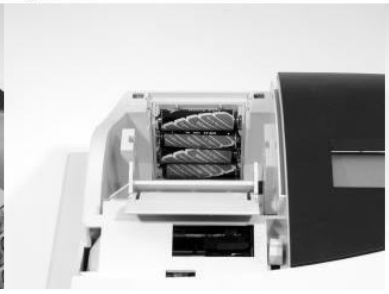
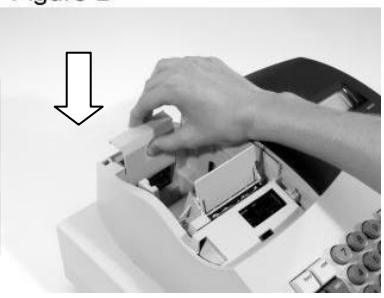


Figure D



LOADING PAPER

HOW TO LOAD THE PAPER

This register uses standard 2 1/4" (57mm) single ply calculator paper to produce either a customer receipt (outside) or a journal record (inside).

Figure E

Figure F

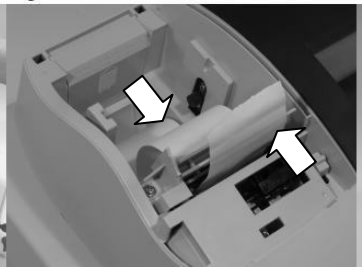


Figure G

Figure H

NOTE: It is recommended to use ROYAL brand 2 1/4" (57mm) "bond quality" paper which will help prevent dust deposits on the printer mechanism caused by inexpensive paper rolls. Replace with standard bond quality calculator paper. **ROYAL Order #013129**.

1. Plug in your cash register and turn the control lock to the "open" position.
2. Grasp the printer cover and pull gently up. Remove the printer cover and set aside. (Figure E)
3. Cut or tear the end of the paper roll evenly for a straight edge to permit proper feeding through the printhead.
4. Place the paper roll in the paper holder so that the paper will feed out from the bottom of the roll.
5. Insert the end of a single paper tape into the paper slot. (Figure F). Adjust writing table as needed to insert the paper.
6. Depress the paper feed [Feed] key until the paper catches and advances through the printer.
7. If the paper does not feed through the printer, make sure the paper was entered properly.
8. Pass the tape through the receipt window of the printer cover.

or

If a journal record is desired, insert the tape into the journal winder. Simply advance the tape approximately 10-12 inches by using the paper feed [Feed] key. Then, slide the tape under the two forks that extend on both sides of the journal winder. (See Figure H). Turn the spindle manually a few times to take up the excess paper. Then advance the paper using the Feed key until the journal paper winds securely around the spindle. (Figure H]

9. Replace the spindle and close the printer cover.

HOW TO CHANGE THE INK ROLL

This register comes equipped with the ink roll installed. The ink roll releases special ink to the printhead which produces printout on the paper. After a period of time, depending upon the amount of use, the ink in the roll will be used up. When printout becomes faint, the ink roll needs to be replaced.

CAUTION:

The ink roll is NOT designed to be re-inked. Under no circumstances should this be done or permanent damage to your cash register printhead will result. Such damage WILL NOT be covered under Royal's warranty.

REPLACE YOUR INK ROLL FOLLOWING THE INSTRUCTIONS BELOW:

1. Turn the control key to the "open" position and open the printer compartment.

2. The ink roll is found in front of the printhead mounted in a plastic cartridge. To remove, grasp the small clip on the left of the ink roll and pull up. The ink roll will easily pull away from the printhead. (Figure I)

3. To replace a new ink roll, insert the ink roll according to markings "L" (Left) and "R" (Right) by pressing downward to lock it into position, then close the printer cover. No tools are necessary. For best performance, store unopened ink roll package in a cool, dry place until installed.

Figure I

NOTE: Replace with ROYAL Ink Roll, **Order #013109**.

QUICK START

Quick Start is a brief but complete start-up program that allows you to "get started" immediately on the most basic aspects of operating your new cash register. Follow these directions precisely:

1. **Read and follow the machine ORIENTATION and set-up instructions on pages 1-11. Reminder: It is important that the register is plugged in before the back-up batteries are installed.**

2. Perform the following Quick Start programming procedures:

   A. Open the printer compartment and place the control switch at the PRG (Program) position.

   B. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been programmed, continue with step C.

   C. Set the current date by typing the numeric keys to represent the **month/day/year**. Single digits must be preceded by a zero. For example, to set June 8, 2002, type **[060802]**. Finalize by pressing the **[#/NS]** key.

   D. Set the current time using the 24-hour clock format. For example: to set 9:15 A.M., type **[0915]**; to set 7:15 P.M., type **[1915]**. Finalize this entry by pressing the **[QTY/TIME]** key.

   E. Set the decimal point as follows (U.S. standard): Type **[1]**, **[2]** and press the **[RA]** key.

   F. To set a fixed Tax Rate (typically for use in the U.S.A. – please see page 42 for Canadian and other foreign tax procedures): Type **[1]** for tax rate #1, then press the **[Tax Shift]** key. Then type the tax rate as a 4-digit number. For example, if your tax rate is 8%, type **[8000]**; if your tax rate is 7.5%, type **[7500]**. Then press the **[Amt/Tend/TOTAL]** key.

   Please note for the next steps you will use the Department Keys which are the keys (Dept Shift, 1-8) located directly to the right of the numeric keys.

   G. In these examples, we will program the register to accept a zero price; press **[8]**, **[1]** and then press the **[RA]** key.

   H. Program Department 1 as taxable items for $1.00. To do this, type the numeric keys **[0][0][1]**, press **[CHECK]**, type **[1][0][0]** and finalize by pressing the **[Department 1]** key. Repeat this procedure for all departments you wish to tax. Optional: If you wish to enter preset department prices, see page 18 for details.

   I. Program Department 2 as non-taxable items with no preset price (price of $0.00). To do this, type the numeric keys **[0][0][0]**, press **[CHECK]**, type **[0]** and finalize by pressing the **[Department 2]** key. Repeat this procedure to all the departments you wish not to tax. Optional: If you wish to enter preset department prices, see page 18 for details.

   J. Basic programming is now complete.

3. To ring up sales, slide the control switch to the R1 or R2 position (R1 winds a Journal Record on the spindle, whereas R2 gives you Customer Receipts through the window opening, as described fully on page 10). Follow the instructions given in "Transaction Examples".

4. To print Management Reports, slide the control switch to the X or Z position as needed, then press the **[Amt Tend/TOTAL]** key. Refer to explanation on page 37 - 41.

Once you have mastered the Quick Start operations, you may want to take advantage of other valuable register functions such as Percent Discount Rate on page 17, Price Look-Ups (PLUs) on page 23 and Security Code on page 25. If you have questions regarding Quick Start or any other aspects of the machine operation, call the Office Zone Product Support Hotline at 1-800-543-5454 ext. 129, Monday through Friday, during standard business hours.

HELPFUL HINTS FOR A SUCCESSFUL START-UP

With reference to specific steps in "Quick Start":

2-F Tax Programming - As an alternative to using your state's fixed rate percentage you may now or later want to use the actual state tax codes found on the Royal web site. The procedure outlined on page 22 can be used in place of Step 2F of the Quick Start.

Note: For the most current state tax tables, please visit **www.royal.com**, the cash register section. A current copy of state tax tables can be downloaded from this site.

GENERAL INFORMATION

- It is not necessary to re-program the entire machine to make a single program change or correction. If you wish to make a change, such as an update on state tax rate, be sure you are in the program mode, then re-do the program in question. A new program entry will automatically override a previous entry.

- Remember; you enter the program mode by moving the Control Switch to the PRG position.

- Be sure to slide the control switch to the "Off" position at the end of a business day.

- In order to assure continuous battery back-up protection, it is important that the batteries be changed at least once every year.

SETTING PROGRAMS

This cash register allows you to set programs customized to your individual business requirements. These programs include:

2. Setting the Time and Date
3. Setting the Clerk System
- Setting a Percent Discount (-%) Rate
- Assigning a Department Tax Status and Pre-set Department prices
- Setting a Tax Rate
- Creating Price Look-Ups
- Assigning a Security Code for the Program and "Z" Management Report Modes

Set some or all of the programs, depending on your business needs. Once selected, these programs reside in the register's memory until you change them.

NOTE: Be sure memory back-up batteries are installed before setting these programs.

SETTING PROGRAMS

All programs are set by first entering the program mode. They are entered using the numeric keypad [0-9] and appropriate operation keys. Program selections appear in the display to verify entry and are printed on the receipt.

In this section you will find simple step-by-step procedures for each program. Following each procedure is an example. We suggest you complete the examples to become familiar with the program, then reset the programs according to your own requirements.

Entering the Program Mode:

1. To access the Control Switch, unlock and open the printer cover.

2. Set the Control Switch to the "PRG" position.

   NOTE: If a security code has been assigned, enter the security code and press the **[CHARGE]** key now.

3. Once in the program mode, you can set some or all of the programs.

Exiting the Program Mode:

After all the desired programs are set, simply move the Control Switch to the "R1" or "R2" position to begin operations or turn to the "Off" position if you are finished.

Clearing Errors:

If an error tone sounds, press the **[C]** key to clear the display. Reenter the program step.

If the prompt "SEC Code" appears, this means a security code was programmed. Enter the 4-digit code followed by the [CHARGE] key. Then proceed with programming.

Note: While you are programming your register, you might shift to R1 or R2 mode to test a feature by running a transaction. If you do not [TOTAL] the transaction, when you return to PRG mode an error tone will sound. Simply return to R1/R2 and [TOTAL] the transaction and then return to PRG mode.

SETTING THE DATE AND TIME

Set the date option to print the current date at the top of each receipt, journal record or management report. The current time can also be displayed by pressing the **[QTY/TIME]** key.

Set the time option to print the current time at the bottom of the receipt. The time will automatically print and display in the 12 hour format. The time prints in the following format: HH•MM. For example: 9:30. If the time is PM, the receipt will print .9-30.

The date and time change automatically as long as the memory back-up batteries are installed.

Setting the Date:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[the numbers]** representing the current date. Use the following format: MMDDYY. NOTE: Single digit numbers for months and days must be preceded by a zero [0].
3. Press the **[#/NS]** key to store the date.
4. Continue with the next program or move the Control Switch out of the Program mode.

Example: Set a date of June 8, 2002

Type/Press:	The Display Shows:	The Receipt Shows:
060802 + [#/NS]	608.02	06·08·02

Date Format: The date will automatically print in the following format: MM-DD-YY (Month-Day-Year). For example: 06·08-02.

To select the Day-Month-Year format:

1. Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[7] [1]** and press **[RA]**.
3. Continue with the next program or move the Control Switch out of the Program position.

To change back to the Month-Day-Year setting, at Step 2, type **[7] [0]** and press **[RA]**.

Setting the Time:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2).
2. Type **[the current time]** using the following format: HHMM.
3. Press the **[QTY TIME]** key to store the time.
4. Continue with the next program or move the Control Switch out of the Program mode.

Example: Set the time at 3:30 PM: (with 12 hour format)

Type/Press:	The Display Shows:	The Receipt Shows:
1530 + [QTY TIME]	15·30	15-30

SETTING THE CLERK SYSTEM

The Clerk System allows transactions to be associated with a clerk #. Optionally, there can be a security code assigned to each clerk # and the register supports up to 8 Clerks. The benefit of the system is that sales can be tracked by clerk; a Clerk report captures the number of transactions and sales.

There are a few steps to set up the Clerk System.

- Activate/Disable the Clerk System
- Assign Clerk # with or without a security code entry required
- Assign the security code to a Clerk #

Activate/Disable the Clerk System:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[44444]**
3. Enter either **[0]** or **[1]** [0] disables the Clerk System; [1] activates the Clerk System.
4. Press the **[Amt/Tend/TOTAL]** key to finish.

Assign Clerk # and Security Code Entry:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[11]**
3. Enter either **[0]** or **[1]** [0] Clerk # only; [1] Clerk # and security code.
4. Press the **[Amt/Tend/TOTAL]** key to finish.

To Assign a Security Code to Clerk #:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
1. Type **[444444]**
2. Press the **[Amt/Tend/TOTAL]** key
3. Enter the **Clerk** # (1 - 8)
4. Enter the (security code) 3 digits. Examples: 123 222, 212 ...
5. Press the **[Clerk]** Repeat steps 3, 4 and 5 for each Clerk # you want to have a security code.
6. Press the **[C]** key to finish.

Printing the Clerk Report:

To print a report of sales by clerk, once the system is activated and Clerk #s assigned, in x mode, press the **[Clerk]** key.

Using the Clerk Feature

Before entering a transaction, press the number on the numeric pad followed by the [Clerk} key to record transactions to that Clerk number.

PERCENT DISCOUNT (-%)

Setting this option automatically calculates the preset rate each time the [-%] key is pressed. This percentage rate can be discounted from an individual item or an entire transaction.

You can override the program rate by manually entering a different rate. (See **TRANSACTION EXAMPLES FOR OPERATING THE CASH REGISTER**).

Setting a Percent Discount (-%) Rate:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.

2. Type **[the numbers]** representing the desired percentage rate.

   NOTE: Up to four digits, 0-99.99, can be used. For example: to enter 10%, type 1000; to enter 6.5%, type 650.

3. Press the **[-%]** key to store the rate.

4. Continue with the next program or move the Control Switch out of the Program mode.

Example: Set a percent discount rate of 5%:

Type/Press:	The Display Shows:	The Receipt Shows:
500	5·00	
[-%]	5·00	5·00 %-

To set a percent discount rate of 10%: press [1000] and then press the [-%] key.

DEPARTMENT TAX STATUS

A total of 16 departments are available on your cash register. Each department can represent a category of merchandise. For example, Department 1 can represent sales of beverages, Department 2; sandwiches, Department 3; candy, etc. Each department can be programmed as taxable or non-taxable. If desired, each department can also be programmed with a preset price.

The programming of the departments consists of 3 steps; selecting the Multiple/Single Item Sale, Tax Status and Department Preset Price.

1. **Tax Status** - allows you to tax or not to tax a department key.
2. **Multiple/Single Item Sales** - Multiple Item Sale (Standard) allows many items to be rung up within a transaction. Single Item Sale allows only one item to be rung up in a transaction.
3. **Department Preset Price** (Optional) - allows you to program a price in a department key to save time when ringing up a sales entry. The price will automatically ring up each time the appropriate department key is pressed.

Note: You can have up to 4 Tax Rates. These are set in the section - Tax Rate. Use the chart below to determine how you want a department to calculate taxes. Keep in mind, for the sake of simplicity, you can set just 1 fixed rate and use that for all departments.

Tax Rate Chart

S2 Code		USA	CANADIAN	VAT
00	Non-Taxable	☐	☐	☐
01	Taxable by TAX 1	☐	☐	☐
02	Taxable by TAX 2	☐	☐	☐
03	Taxable by TAX 3	☐	☐	☐
04	Taxable by TAX 4	☐	☐	☐
05	Taxable by TAX 1 and TAX 2	☐	☐	
06	Taxable by TAX 1 and TAX 3	☐	☐	
07	Taxable by TAX 1 and TAX 4	☐	☐	
08	Taxable by TAX 2 and TAX 3	☐	☐	
09	Taxable by TAX 2 and TAX 4	☐	☐	
10	Taxable by TAX 3 and TAX 4	☐	☐	
11	Taxable by TAX 1, TAX 2 and TAX 3	☐	☐	
12	Taxable by TAX 1, TAX 2 and TAX 4	☐	☐	
13	Taxable by TAX 1, TAX 3 and TAX 4	☐	☐	
14	Taxable by TAX 2, TAX 3 and TAX 4	☐	☐	
15	Taxable by TAX 1, TAX 2, TAX 3 and TAX 4	☐	☐	

ZERO PRICE ENTRY SETTING

This procedure allows a "0" price to be entered for a department or PLU price. The default setting does not accept a "0" price.

1. Enter the **Program** mode: Move the Control Switch to the "PRG" position.
2. To allow zero price entry, type **[8]**, then **[1]**, followed by the **[RA]** key.
3. To prohibit zero price entry, type **[8]**, then **[0]**, followed by the **[RA]** key. **Please note this is the default setting**.

TO PROGRAM DEPARTMENTS AS TAXABLE

Example: Program Department 1 as taxable, using Tax Rate 1, multiple entry and pre-set price of 1.99:

1. Enter the program mode. Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.
2. Type **[0]** or **[1]** 0 = Multiple Sales ; 01 = single item
3. Type (S2 Code) **[2-digit #]** from the Tax Rate Chart above.
4. Press the **[CHECK]** key.
5. Type **[Pre-set Price]**. If you do not wish to program a department pre-set price, enter "0".
6. Press the **[DEPARTMENT]** key.

Repeat these steps for each department you will be using.

Example: [0] + [01] + [Check] + [199] + [Department 1]

TO PROGRAM DEPARTMENTS AS NON-TAXABLE

Example: Program Department 2 as non-taxable, multiple entry and no pre-set price:

1. Enter the program mode. Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.
2. Type **[0]** for Multiple Item Sale, then type **[00]** for no tax. Press the **[CHECK]** key.
3. Press **[0]** for no pre-set price, then press the **[DEPARTMENT 2]** key.

Example: [0] + [00] + [Check] + [0] + [Department 2]

TAX RATE

Programming the Tax Rate

This unit supports up to 4 Tax Tables; therefore, it allows 4 separate tax rates to be established and each of those rates can be linked to a department. For instance, Tax1 could be 6%, Tax2 could be 8%, Tax3 could be 5.5% and Tax4 could be 2%. By establishing separate tax rates, a separate Tax rate total is printed on the management report, if you want to know taxes paid by rate.

Each tax rate can be programmed as either a **fixed percent tax rate** or **tax table rate**. The fixed rate is a fixed percentage charged on the total item. For example, 5%. A tax table rate is based on an approved chart issued by your state your local tax authority.

NOTE: Some individual state tax tables are available to be downloaded at www.royal.com in the Cash Register section of the web site.

The tax system can be set for one of the following settings:

0 = USA Tax Mode (standard setting for U.S. tax)
1 = Canadian Tax Mode
2 = VAT Tax Mode (commonly used in European Countries)

The cash register has already been set at the factory for the USA Tax Mode. If you need to change to the Canadian Tax System or to the VAT Tax System, following the instructions in those sections.

See the next page for programming details.

TO PROGRAM A FIXED TAX RATE: (Recommended For Most Applications)

"PRG" + Tax 1 - 4 + [Tax Shift] + Tax Rate (4 Digit #) + (Amt/Tend/TOTAL)

Note: You can program up to 4 Tax Rates or just 1. The following steps allow you to set up 1 or up to 4. Remember, when you determine a department's tax status, at that point, you identify the tax rate you want for that department.

If you make a mistake between steps 2 and 4, press the Clear **[C]** key and start again at step 2.

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Enter **(1 - 4)** , 1 through 4 being the Tax Rate identifier.
3. Press **[Tax shift]** key
4. Enter the **Tax Rate**. Up to 5 digits can be used. You MUST enter three digits after the desired decimal place. For example, to enter 5.5%, type **[5500]**; to enter 7%, type **[7000]**; to enter 10%, type **[10000]**.

Note: If you want to set up another Tax Rate, return to step 2. When you are finished setting Tax Rates, go to step 5 to complete the procedure.

5. Press the **[Amt Tend/TOTAL]** key.

Continue with other programming or move the Control Switch out of the Program mode.

Example: Set a tax rate of 5.5%:
1. If needed, move the Control Switch to the Program mode (PRG).
2. Enter [5500] + the [Amt Tend/TOTAL] key.

TAX TABLE (AN ALTERNATIVE FOR USING THE FIXED PERCENTAGE TAX RATE)

If you wish to assign a state tax table rate (instead of a fixed percentage), a series of codes must be used. These codes are derived from an approved state tax table chart. If your state's tax rate is not listed in Appendix I, refer to Appendix II for instructions on calculating your own state's tax table code.

TO PROGRAM A SINGLE TAX TABLE RATE

"PRG" + (State Tax Table Code) + (Tax Shift)

Repeat as needed for each code

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the [CHARGE] key now. If not, continue with Step #2.
2. **Type each tax table code** followed by the **[TAX SHIFT]** key.

Example: The tax code for Arizona 4% is: 121-240096-13-19-23-27-27-1029-25-25-25-1025.

1. **Move the Control Switch to the "PRG" position.**
2. **Enter [121] + the [TAX SHIFT] key.**
3. **Enter [240096] + the [TAX SHIFT] key.**
4. **Enter [13] + the [TAX SHIFT] key.**
5. **Enter [19] + the [TAX SHIFT] key.**
6. **Continue entering the tax codes and press the [TAX SHIFT] key after each code until finished.**

3. Continue with other programming or move the Control Switch out of the Program position.

PRICE LOOK UP (PLU)

A total of 200 Price Look Up codes (PLUs) are available on this cash register. The Price Look Up system allows for fast, accurate entry of an item and automatically records the number of items sold. There are 2 methods in programming PLUs. One method is to set the PLU number with a preset price known as a Fixed PLU Price. The second method is to set the PLU without a preset price, where you are able to manually enter the price of an item while still having the sales activity recorded under the PLU number on management reports, known as an Open PLU Price (sub-department). The Open PLU Price is recommended for items whose prices change frequently.

Before getting started with programming PLUs, the following 3 steps should be done:

1. Make a list of the PLU numbers and their prices you wish to program.
2. Decide whether you want the PLU number designated as a Fixed PLU Price or an Open PLU Price. **Note: The Fixed PLU Price does not allow you to override or change a preset price in the register mode, whereas the Open PLU Price does.**
3. Determine if each PLU number requires tax or no tax. If tax is required for a particular PLU number, be sure to link the PLU number to a department that is programmed for tax. Likewise, if a PLU number does not require tax, then link the PLU number to a department not programmed for tax.

Program PLU Status

Note: This procedure should only be done if you are interested in the Open PLU Price (sub-department) option. Otherwise, proceed to the next section on Programming PLU Prices.

1. Enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.
2. Press the **[PO]** key to begin programming the PLU Status.
3. Type the **[PLU # (between 001-199)]**, press the **[PLU]** key, type the **[PLU Status #]** and press the **[Department]** key.

   PLU Status **0** = Fixed PLU Price (This is the factory default option).
   PLU Status **1** = Open PLU Price (Sub-department option).

4. Repeat Step #3 for all desired PLU numbers.
5. Press the **[PO]** key to finish programming the PLU Status.
6. Continue to the next section on programming the PLU Price.

Program PLU Prices

1. Enter the Program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.
2. Press the **[QTY/TIME]** key to begin programming.
3. Type the **[PLU Number (between 001-199)]**, press the **[PLU]** key, type the **[PLU Price]** and press the **[Department]** key.
4. Repeat Step #3 for all desired PLU numbers. **Note: When programming PLU numbers consecutively, it is not necessary to type the PLU number each time. The system automatically prompts you with the next PLU number**.
5. Press the **[QTY/TIME]** key to finish programming PLU prices.

CONFIRMATION REPORTS: No printing will occur during programming of PLUs. To print a PLU Confirmation Report, turn to the next page.

PLU CONFIRMATION REPORT

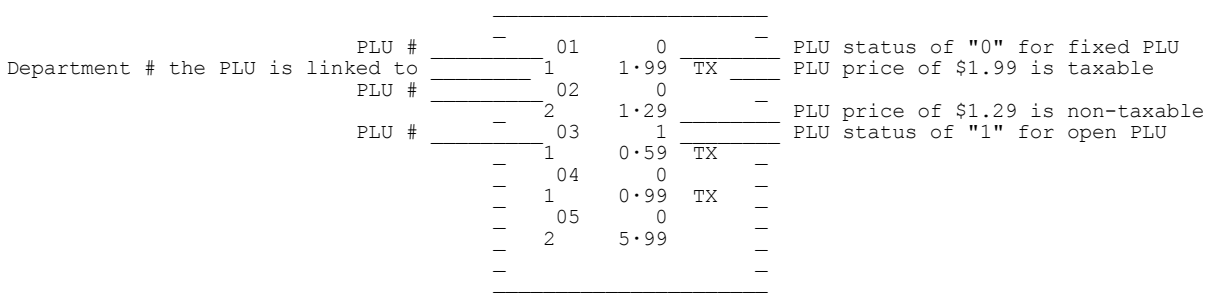
To print a PLU Confirmation Report

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.

2. Press the **[PLU]** key. The PLUs programmed will print. See sample printout below.

3. Continue with other programming or move the Control Switch out of the "PRG" position.

PLU Confirmation Report


PLU # 01 0 PLU status of "0" for fixed PLU
Department # the PLU is linked to 1 1·99 TX PLU price of $1.99 is taxable
PLU # 02 0
2 1·29 PLU price of $1.29 is non-taxable
PLU # 03 1 PLU status of "1" for open PLU
1 0·59 TX
04 0
1 0·99 TX
05 0
2 5·99

SETTING THE SECURITY CODE AND DECIMAL POINT

SECURITY CODE: For Program and Management Report Protection

Management Reports can be printed in either the "X" or "Z" positions on the Control Switch. When printed in the "Z" position, transaction totals are reset to zero. Assigning a security code can prevent accidental reset of transaction totals. Once assigned, the "Z" report prints ONLY after entering the security code.

NOTE: Assign a number easily remembered. You should also keep the program receipt as a reminder. If you do forget the code, reset this program with a new code. Then, print the report using the new code.

Assigning a Security Code:

1. If necessary, enter the program mode. (Move the Control Switch to the "PRG" position).
2. **Type (the numbers) representing the security code. (Up to four digits can be used).**
3. Press the **[CHARGE]** key to store the code.

Example: Assign a security code of "7748":

Type/Press:	The Display Shows:	The Receipt Shows:
7748 + [CHARGE]	77.48	77.48 CH

NOTE: IF YOU SET A SECURITY CODE, YOU WILL NOT BE ABLE TO ALTER YOUR PROGRAM OR PRINT YOUR MANAGEMENT REPORTS UNTIL YOUR SECURITY CODE HAS BEEN ENTERED. THE PROMPT "SEC CODE" WILL APPEAR IN THE DISPLAY TO REMIND YOU TO ENTER THE CODE. TO DELETE A SECURITY CODE NUMBER: ENTER THE PROGRAM MODE, TYPE [0] [0] [0] [0] AND PRESS THE [CHARGE] KEY.

Using a Security Code in the Program Mode:

1. In the "PRG" mode, enter the 4-digit code and press the **[CHARGE]** key. Proceed with programming.

Using a Security Code in the "Z" Mode:

1. To print a "Z" report when a security code has been assigned, in the "Z" mode, enter the 4-digit code and press the **[Amt Tend/TOTAL]** key.
2. The "Z" report will print.

SETTING THE DECIMAL POINT

To set 2 decimal place (standard in the U.S.):

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been assigned, continue with Step #2.
2. Type the numbers **[1]**, **[2]**, followed by the **[RA]** key.
3. If finished with programming, move the Control Switch out of the "PRG" position.

THE SAME PROCEDURES APPLY FOR OTHER DECIMAL SETTINGS AS FOLLOWS:

[1] + [0] + [RA] = 0.
[1] + [1] + [RA] = 0.0
[1] + [2] + [RA] = 0.00 Standard setting for U.S.
[1] + [3] + [RA] = 0.000

SETTING THE EURO CONVERSION FEATURE

CONVERSION FEATURE: **Useful along Border States for currency conversion**

The Euro Conversion feature provides an automatic method of currency conversion. It establishes one currency as the Local currency and another currency as the converted currency. Once the rate is established, it will remain the rate unless changed. This feature does not use a daily exchange rate but is established through the following programming steps. The rate can be changed as frequently as one would want to change the rate, either daily, weekly, monthly or annually.

There are a few steps to set up the Euro Conversion feature.

- Activate/Disable the System
- Print the Currencies to be printed
- Establish the Local/Euro Currency as Standard
- Setting the Conversion Rates

Activate/Disable the Euro Conversion Feature:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[7]**
3. Enter either **[0]** or **[1]** [0] disables the feature; [1] activates the feature.
4. Press the **[RA/Euro]** key to finish.

Print the Currencies to Be Printed:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[9]**
3. Enter either **[0]** or **[1]** [0] print both currencies; [1] print only tendered currency.
4. Press the **[RA/Euro]** key to finish.

Establish the Local/Euro Currency as Standard:

1. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
2. Type **[10]**
3. Enter either **[0]** or **[1]** [0] = Local; [1] Euro.
4. Press the **[RA/Euro]** key to finish.

Setting the Conversion Rates:

2. If needed, enter the program mode: Move the Control Switch to the "PRG" position. If a security code has been assigned, enter the number and press the **[CHARGE]** key now. If not, continue with Step #2.
3. Type **[0 - 8]** 0-8 is the number of decimal places for the local currency
4. Type [0-8] 0-8 is the number of decimal places for the Euro currency
5. Type [0.00000001 - 999999] this is the rate of conversion. See example below.
6. Press the **[VOID]** key to finish.

In the above step you establish the rate of the local currency and the rate of the converted currency. For instance, for use along US/Canadian borders, the local currency is US dollars (USD) and the converted currency is Canadian dollars (CND); the conversion rate might be 1 USD = 1.5 CND. To program this example, enter:

1 (for USD) 2 (for CND) 000015 (for conversion rate) [VOID]

SUMMARY OF PROGRAMS

Listed below is a recap of all programs set according to the examples used in this section:

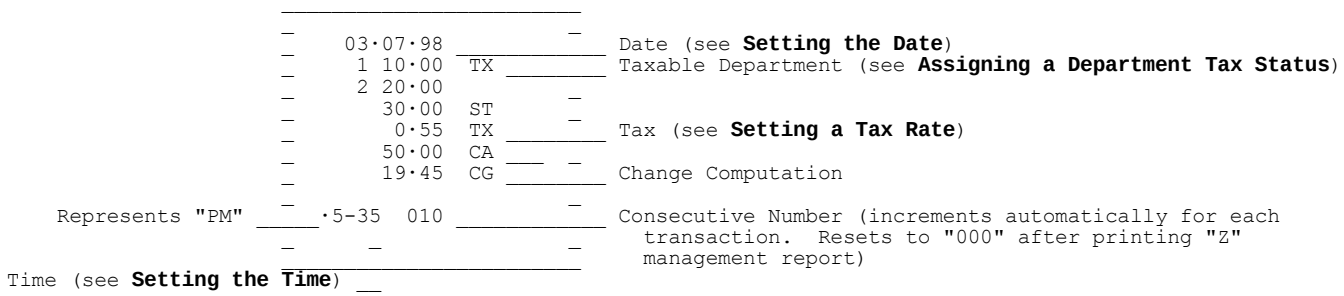
Program/Example	Type/Press	Sample Receipt
SET CONTROL SWITCH TO "PRG"		
SET DATE: MARCH 7, 1998	(030798) + [#/NS]	03·07·98
SET TIME: 3:30 PM	(1530) + [QTY/TIME]	15·30 5·00 %-
SET -% RATE: 5%	(500) + [-%]	001 CK 1 0·00 TX
ASSIGN TAX STATUS:		000 2 0·00
DEPT 1 - TAXABLE	(0) + (01) + [CHECK] + (0) + [DEPARTMENT 1]	0·01 TX
DEPT 2 - NO TAX	(0) + (00) + [CHECK] + (0) + [DEPARTMENT 2]	55·00 TX
		77·48 CH
SET FIXED TAX: 5.5%	(5500) + [AMT TEND/TOTAL]	
ASSIGN A SECURITY CODE: 7748	(7748) + [CHARGE]	

TRANSACTION EXAMPLES

The examples in this section show how to complete different type of transactions. Sample receipts are included that reflect the program examples used in setting **THE REGISTER PROGRAMS**.

SAMPLE RECEIPT

The following sample shows where general transaction information is printed on a receipt and what program options must be set to print the appropriate options. (See **THE REGISTER PROGRAMS** for specific instructions).



TRANSACTION SYMBOLS

The following symbols appear on the paper tape. They are printed to the right of entries to identify various totals and transaction operations. Some of these symbols also appear on the management report. They include:

- CA - Cash Transaction Total
- CH - Charge Transaction Total
- CA - Amount Tendered
- ST - Subtotal, Excluding Tax
- CG - Change
- % - Percent Discount Applied To An Item Or Sale
- - - Coupon / Discount / Refund Or Void
- X - Quantity Being Multiplied
- @ - Item Price Being Multiplied
- VD - Voided Previous Entry
- RF - Refund Or Return (Management Report Only)
- # - Identification Number
- NS - No Sale Receipt
- CL - Clerk
- TS - Tax shift

TRANSACTION EXAMPLES

STANDARD TRANSACTIONS

Registering a Single Item Sale and Tendering Change

NOTE: Up to 7 digits can be used for the amount of the entry.

Example: Register a $1.00 item in Department 1 (programmed at 5.5% fixed tax rate). Subtotal transaction and compute change for $5.00.

1.	**[100]** + **[DEPARTMENT 1]**	1	1·00	TX
			1·00	ST
2.	**[SUBTOTAL]**		0·06	TX
			5·00	AT
3.	**[500]** + **[Amt Tend/TOTAL]**		3·94	CG
		·5-35	010	

Registering a Sale to Multiple Items

NOTE: Up to two digits can be used for the quantity multiplied.

Example: Multiply two items times $1.50 to Department 1.

1.	**[2]** + **[QTY/TIME]** + **[150]** + **[DEPARTMENT 1]**		2·	X
			1·50	@
2.	**[SUBTOTAL]**	1	3·00	TX
			3·00	ST
3.	**[Amt Tend/TOTAL]**		·17	TX
			3·17	CA
		·5-36	011	

Registering a Charge Transaction

NOTE: Charge transactions are counted and registered to the charge total in the financial report.

Example: Register a $2.50 item to Department 1 and a $3.00 item to Department 2 as a charge transaction.

1.	**[250]** + **[DEPARTMENT 1]**	03·07·98		
2.	**[300]** + **[DEPARTMENT 2]**	1	2·50	TX
		2	3·00	
3.	**[CHARGE]**		0·14	TX
			5·64	CH
		·5-37	012	

TRANSACTION EXAMPLES

Using Split Tendering

Example: Register a $10.00 item and a $15.00 item to Department 2; split the total between $20.00 cash and $5.00 charge.

1. **[1000]** + **[DEPARTMENT 2]**
2. **[1500]** + **[DEPARTMENT 2]**
3. **[SUBTOTAL]**
4. **[2000]** + **[Amt Tend/TOTAL]** + **[CHARGE]**

```
2   10·00
2   15·00
      25·00      ST
      20·00      CA
       5·00      CH
·5-38  013
```

MINUS (-) KEY TRANSACTIONS

Registering a [-] Reduction:

NOTE: Up to 7 digits can be used for the amount of the reduction.

Example: Register a 10¢ reduction (coupon) on a $2.00 item to Department 2.

1. **[200]** + **[DEPARTMENT 2]**
2. **[10]** + **[Ref/-]**
3. **[Amt Tend/TOTAL]**

```
2     2·00
     -0·10
      1·90      CA
·5-39  014
```

PERCENT DISCOUNT (-%) TRANSACTIONS

Discounting [-%] Individual Items

NOTE: Up to four digits can be used for the discount percentage (0-99.99%). You **MUST** enter two digits after the decimal position.

Example: Register a 10% discount to a transaction.

1.	**[100] + [DEPARTMENT 1]**	1 1·00	TX
		10·00	%
2.	**[1000] + [-%]**	-0·10	-
		·90	ST
3.	**[SUBTOTAL]**	0·05	TX
		0·95	CA
4.	**[Amt Tend/TOTAL]**	·5-40 016	

Using a Preset Discount (-%) On The Total Sale:

Example: Register the preset percent discount (5%) to an entire transaction.

1.	**[100] + [DEPARTMENT 1]**	1 1·00	TX
		1 2·00	TX
2.	**[200] + [DEPARTMENT 1]**	3·00	ST
		5·00	%
3.	**[SUBTOTAL]**	-0·15	-
		0·16	TX
4.	**[-%]**	3·01	CA
		·5-41 017	
5.	**[Amt Tend/TOTAL]**		

Using a Preset Discount (-%) on Individual Items:

Example: Register the preset percent discount (5%) on a $3.00 item to Department 2.

1.	**[300] + [DEPARTMENT 2]**	2 3·00	
		5·00	%
2.	**[-%]**	-0·15	-
		2·85	CA
3.	**[Amt Tend/TOTAL]**	·5-42 019	

Overriding the Preset Discount (-%]:

Example: Register a 15% discount (to override preset 5%] on a $10.00 item to Department 2. NOTE: You **MUST** enter two digits after the decimal position.

		·1·	
1.	**[1000] + [DEPARTMENT 2]**	2 10·00	
		15·00	%
2.	**[1500] + [-%]**	-1·50	-
		8·50	CA
3.	**[Amt Tend/TOTAL]**	·5-43 020	

TRANSACTION EXAMPLES

PLU CODES

Note: PLU Codes must be preset to use this feature. See The Register Programs to assign PLU information.

Using a Fixed PLU Price:

Example: Register PLU #1 programmed at the preset price of $1.50:

1.	**[1]** + **[PLU]**	01 1·50 TX
		1·50 ST
2.	**[SUBTOTAL]**	0·08 TX
		1·58 CA
3.	**[Amt Tend/TOTAL]**	·5-30 036

Using an Open PLU Price (Sub-department):

Example: Register the price of $2.00 in PLU #3:

1.	**[3]** + **[PLU]**	03 2·00 TX
		2·00 ST
2.	**[200]** + **[PLU]**	0·10 TX
		2·10 CA
3.	**[SUBTOTAL]** + **[Amt Tend/TOTAL]**	·5-30 037

Using an Open PLU Price (Sub-department) with a Preset Price:

Example: Register PLU #3 programmed with the preset price of $10.00:

1.	**[3]** + **[PLU]**	
		03 10·00 TX
2.	**[PLU]**	10·00 ST
		0·50 TX
3.	**[SUBTOTAL]** + **[Amt Tend/TOTAL]**	10·50 CA
		·5-30 038

VOIDS AND REFUNDS

Voiding the Previous Entry in the Middle of a Sale:

Example: Void a $2.00 entry to Department 2 made in error. Then register a $3.00 item in Department 2.

1. **[200]** + **[DEPARTMENT 2]**
2. **[VOID]**
3. **[300]** + **[DEPARTMENT 2]**
4. **[Amt Tend/TOTAL]**

```
2    2·00TX
2   -2·00VD
2    3·00
     3·00CA
```

NOTE: To void an earlier entry or entire transaction, complete the transaction then follow the directions for a void.

Voiding a Single Item:

Example: Void a $1.00 item in Department 1.

1. **[VOID]**
2. **[100]** + **[DEPARTMENT 1]**
3. **[Amt Tend/TOTAL]**

```
1   -1·00VD
    -0·06TX
    -1·06CA
·5-45  023
```

Voiding Multiple Items:

Example: Void a $1.00 item in Department 1 and a $2.00 item in Department 2.

1. **[VOID]**
2. **[100]** + **[DEPARTMENT 1]**
3. **[VOID]**
4. **[200]** + **[DEPARTMENT 2]**
5. **[Amt Tend/TOTAL]**

```
1   -1·00VD
2   -2·00VD
    -0·05TX
    -3·05CA
·4-23  021
```

TRANSACTION EXAMPLES

REFUNDS

Refund a Single Item:

Example: Refund a $1.00 item in Department 1.

1. **[Ref/-]**
2. **(100)** + **[DEPT 1]**
3. **[Amt Tend/TOTAL]**

```
                1    -1·00TX
                     -0·05TX
                     -1·05CA
·4-31  023
```

Refund Multiple Items:

Example: Refund a $1.00 item in Department 1 and a $2.00 item in Department 2.

1. **[Ref/-]**
2. **(100)** + **[DEPT 1]**
3. **[Ref/-]**
4. **(200)** + **[DEPT 2]**
5. **[Amt Tend/TOTAL]**

```
                1    -1·00TX
                2    -2·00
                     -0·05TX
                     -3·05CA
·4-31  024
```

Example: Refund 3 items at $1.00 in Department 1.

1. **[Ref/-]**
2. **(3)** + **[QTY/TIME]**
3. **(100)** + **[DEPT 1]**
4. **[Amt Tend/TOTAL]**

```
                     3·X
                1·00@
                1    -3·00TX
                     -0·17TX
                     -3·17CA
·3-45  015
```

TAX OVERRIDE TRANSACTIONS

Exempting Tax on an Item:

NOTE: Use this procedure to exempt an item from being taxed when registered to a taxable department.

Example: Exempt tax from a $2.00 item to Department 1 (preset at 5.5% fixed tax rate - 1).

1. **[TAX SHIFT]** + **[200]** + **[DEPARTMENT 1]**
2. **[100]** + **[DEPARTMENT 1]**
3. **[Amt Tend/TOTAL]**

```
1    2·00
     1·00TX
     0·06TX
     3·06CA
·5-45  024
```

Exempting Tax on an Entire Sale:

Example: Exempt tax on the entire sale registered to Department 1 (preset at 5.5% fixed tax rate).

1. **[300]** + **[DEPARTMENT 1]**
2. **[500]** + **[DEPARTMENT 1]**
3. **[TAX SHIFT]**
4. **[Amt Tend/TOTAL]**

```
1    3·00TX
1    5·00TX
     8·00CA
·5-45  025
```

Adding Tax to a Non Taxed Department:

Example: Add the TX 1 preset rate (5.5% fixed tax rate) to a $1.00 item registered to Department 2 (preset as non taxable).

1. **[TAX SHIFT]** + **[100]** + **[DEPARTMENT 2]**
2. **[Amt Tend/TOTAL]**

```
2    1·00TX
     0·06TX
     1·06CA
·5-46  026
```

TRANSACTION EXAMPLES

OTHER TRANSACTIONS

Registering Money Received On Account:

Example: Register $10.00 received on account.

1. **[1000]** + **[RA]**

10·00RA
·5-46 027

Paying Money Out:

Example: Pay out $5.00.

1. **[500]** + **[PO]**

-5·00PO
·5-46 028

Registering an Identification Number:

NOTE: Up to 7 digits can be used for the identification number. This entry can be made prior to any operation. The # identification is not added to the management report or totals.

Example: Assign the ID number "12345" to a transaction.

1. **[12345]** + **[#/NS]**

12345 #

2. **[100]** + **[DEPARTMENT 1]**

1·00TX
0·06TX
1·06CA

3. **[Amt Tend/TOTAL]**

·5-47 029

Registering a No Sale:

NOTE: This operation simply prints a no sale receipt. An activity is registered to the activity counter in the management report.

1. [#/NS]

NS
·5-48 030

"X" AND "Z" SALES MANAGEMENT REPORTS

Transaction data is maintained in the memory of the cash register as long as the battery back-up system is in effect. This data can be printed as a report for management review.

The Management Report can be printed from either the "X" or the "Z" position on the Control Switch.

"X" POSITION REPORT (Refers to a mid-day reading)

The "X" position report prints the accumulated information and RETAINS ALL TOTALS IN MEMORY. Use this position to print periodic readings of transaction information. (Some users call the X-report a mid-day report).

"Z" POSITION REPORT (Refers to an end-of-day or close-out reading)

The "Z" position report prints the same information as the "X" report. However, once this report is printed, ALL TRANSACTION TOTALS ARE RESET TO ZERO except the grand total. (Some users call the Z-report an end-of-day report).

NOTE: To prevent accidental printing of the "Z" report, set the security code as explained in the SECURITY CODE section. Once this code is set, a "Z" report will not print until the security code is entered. If a "Z" report is attempted without entering the security code, the prompt "SEC Code" will appear in the display.

PRINTING THE SALES REPORT

IMPORTANT: Once a "Z" reading is taken, it cannot be duplicated, so be sure to have plenty of paper in the register.

1. Set the Control Switch to either the **"X"** or **"Z"** position.

2. Press the **[Amt Tend/TOTAL]** key.

NOTE: If a security code has been assigned, be sure to enter the security code before pressing the [Amt Tend/TOTAL] key.

TO CLEAR THE GRAND TOTAL:

1. Set the Control Switch to the **"PRG"** (Program Mode) position.

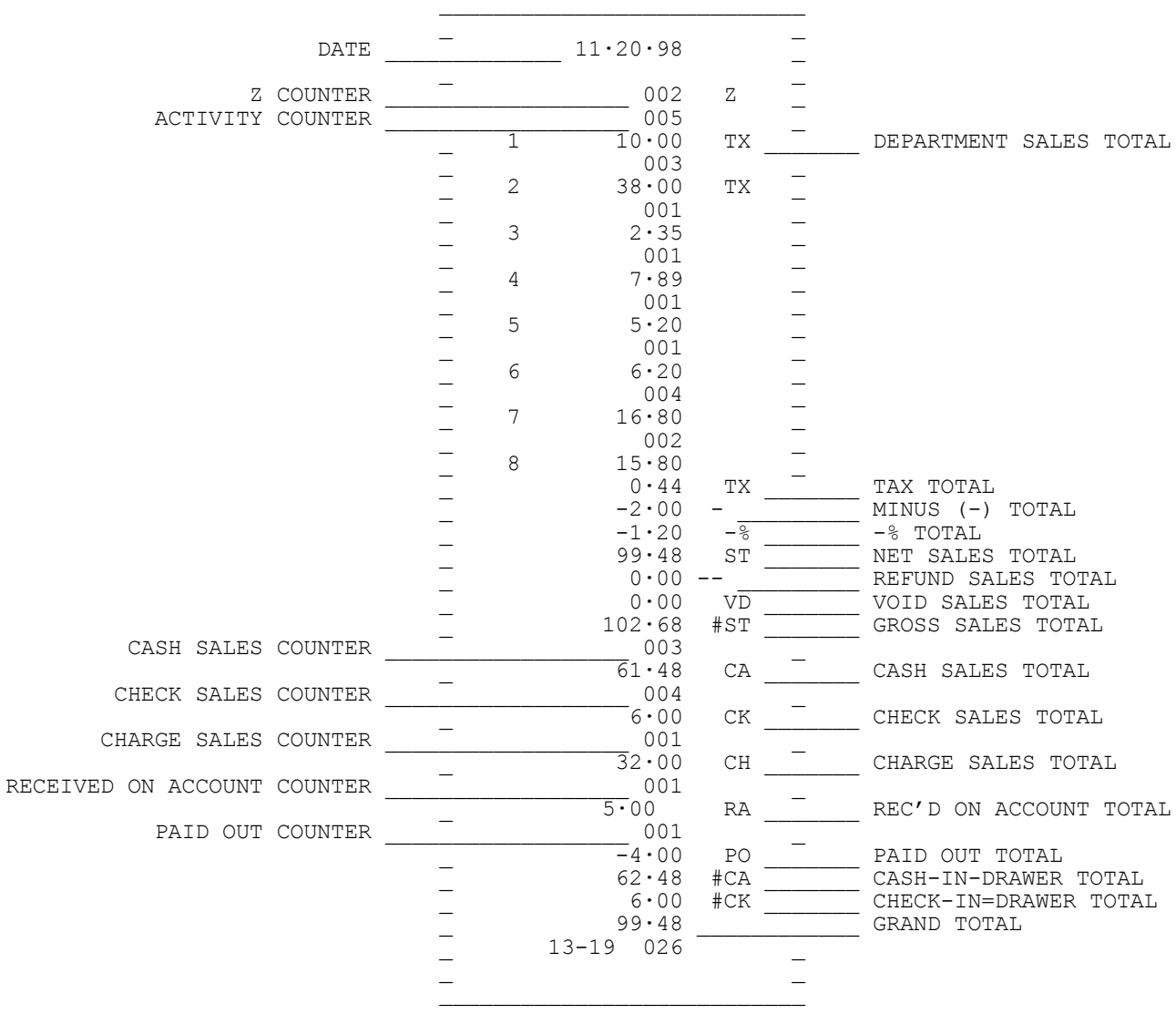
Note: If a security code has been assigned, enter the # and press the [CHARGE] key. If not, continue with Step 2.

2. Type **[2]**, type **[0]**, then press **[RA]**.

After this operation, the grand total reverts to zero.

SAMPLE MANAGEMENT REPORT

The Management Report provides the following information as shown in the sample below:



The following examples illustrate how totals are calculated for the management reports:

System Balance:

(+) DEPARTMENT 1
(+) DEPARTMENT 2
(+) DEPARTMENT 3
(+) DEPARTMENT 4
(+) DEPARTMENT 5
(+) DEPARTMENT 6
(+) DEPARTMENT 7
(+) DEPARTMENT 8
(-) MINUS TOTAL
(-) -% TOTAL
(+) TAX TOTAL

(=) NET SALES

(+) NET SALES
(+) MINUS SALES
(+) -% TOTAL
(+) RETURN TOTAL
(+) VOID TOTAL

(=) GROSS SALES

(+) NET SALES
(+) PREVIOUS GRAND TOTAL

(=) ENDING GRAND TOTAL

Media Balance:

(+) NET SALES
(-) CHECK
(-) CHARGE
(+) RECEIVED ON ACCOUNT
(-) PAID OUT
(-) PAYMENTS OUT

(=) CASH IN DRAWER

PLU REPORT

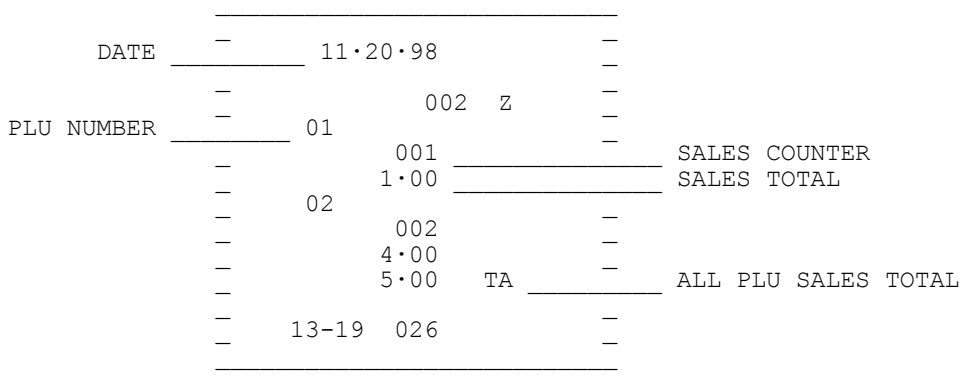
PLU Reports can be taken in either the X or Z position. Remember, if the PLU Report is taken in the Z position, the total will be reset to zero.

1. Move the Control Switch to the **"X"** or **"Z"** position as desired.

2. If a security code has been assigned, enter the security code and press the **[CHARGE]** key. If no security code has been programmed, continue with Step #3.

3. Press the **[PLU]** key.

4. The PLU Report will print.



TROUBLESHOOTING

In case of operational difficulty:

1. Be sure the unit is plugged into a working electrical outlet and no other electrical device is using the same power source. Another electrical motor on the same circuit could cause interference with register operations.

2. Check that the Control Switch is set to the proper position.

3. Review the operating instructions to be sure the transactions have been performed as described in this instruction manual.

4. If you are in the Program (PRG) or "Z" modes and the error tone sounds and the prompt "SEC Code" appears in the display, this means a manager's security code was programmed. See page 25 for further information.

5. If the register still does not function, use the Full System Clear Procedure:

   CAUTION: The Full System Clear Procedure erases all transaction data AND all programs from the memory.

   A. Turn the side switch to the "Off" position.

   B. Remove the top battery and unplug the register for at least 20 minutes. (Batteries are located in the journal compartment.)

   C. Plug the register back in and replace the battery.

   D. Reprogram the register.

6. If you cannot resolve your difficulty using the previous four steps, feel free to call Office Zone Cust. Service at 1-800-543-5454.

TAX SYSTEM PRESET

In addition to the USA tax mode of ADD-ON TAX which is the standard factory setting for this register, two other tax systems are available as follows:

1. **Canadian Tax System** - Special tax programming for the taxation system in Canada.

2. **VAT (Value Added Tax)** - which means that the tax amount is included in the price of the item. This tax system is most commonly used in European countries.

The tax system is set as follows:

Tax Status Number

Default = 0 USA Tax Mode - Standard Setting for U.S. tax
1 Canadian Tax Mode
2 VAT Tax Mode - Commonly used in European Countries

"PRG" + [3] + [Tax Status Number] + [RA]
1 digit #

1. Enter the Program Mode: Move the Control Switch to the **"PRG"** position. If a security code has been assigned, enter the # and press the **[CHARGE]** key now. If not, continue with Step #2.

2. Type **[3]**, then type the setting number for the tax system desired: **0 = USA Tax; 1 = Canadian Tax; 2 = VAT Tax.**

For USA tax programming, please see Page 21. For VAT tax programming, please see Page 43. For Canadian tax, see Page 44.

Tax Status Number	Condition
00	Non-Taxable
01	Taxable by Tax 1
02	Taxable by Tax 2
03	Taxable by Tax 3
04	Taxable by Tax 4
05	Taxable by Tax 1 and Tax 2
06	Taxable by Tax 1 and Tax 3
07	Taxable by Tax 1 and Tax 4
08	Taxable by Tax 2 and Tax 3
09	Taxable by Tax 2 and Tax 4
10	Taxable by Tax 3 and Tax 4
11	Taxable by Tax 1, Tax 2 and Tax 3
12	Taxable by Tax 1, Tax 2 and Tax 4
13	Taxable by Tax 1, Tax 3 and Tax 4
14	Taxable by Tax 2, Tax 3 and Tax 4
15	Taxable by Tax 1, Tax 2, Tax 3 and Tax 4

VAT TAX SYSTEM

The VAT tax system, which stands for Value Added Tax, is most commonly used in European Countries. With VAT tax, the tax amount is already included in the price of the item, yet the tax amount will print on the receipt. Up to 4 VAT tax rates can be programmed.

To choose the VAT Tax System, please complete the following:

a.Enter the Program Mode: Move the Control Switch to the **"PRG"** position. If a security code has been assigned, enter the # and press the **[CHARGE]** key now. If not, continue with Step #1.

Step 1: Type **[3]**, type **[2]**, then press the **[RA]** key.

Step 2: Program the VAT Tax Rate as follows:

[TAX #] + [TAX SHIFT] + [TAX RATE] + [AMT TEND/TOTAL]	
1-4	0 - 99.999%

Example: Program a VAT Tax 1 rate as 15%:

1. If needed, enter the Program Mode: Move the Control Switch to the **"PRG"** position. If a security code has been assigned, enter the # and press the **[CHARGE]** key now. If not, continue with Step #2.

2. Type **[1]**, press **[TAX SHIFT]**, type the tax rate as **[15000]**, then press **[Amt Tend/TOTAL]**.

CANADIAN TAX SYSTEM

To choose the Canadian Tax System, please complete the following:

1. Enter the Program Mode: Move the Control Switch to the **"PRG"** position. If a security code has been assigned, enter the # and press the **[CHARGE]** key now. If not, continue with Step 2.

2. Type **[3]**, type **[1]**, then press the **[RA]** key.

3. Program the Tax Rate as follows:

TAX # + [TAX SHIFT] + [(NON-TAXABLE LIMIT PRICE*) + (REF/-)] + [TAX RATE] + [AMT TEND/TOTAL]		
1-4	Maximum 6 Digits	0 - 99.999%

* The non-taxable limit is used in certain areas where tax is exempted below a certain amount, for example, any amount below $4.00* is exempt from PST tax. If there is no non-taxable limit, simply skip this step in brackets in the procedure above.

CANADIAN TAX - METHOD #1

GST Tax: 7%
PST Tax: 8%
GST/PST Tax: Both 7% and 8% calculated on the net amount

1. Program Tax 1 as 7%:

[1] + [TAX SHIFT] + [7000] + [AMT TEND/TOTAL]

2. Program Tax 2 as 8%:

[2] + [TAX SHIFT] + [8000] + [AMT TEND/TOTAL]

3. Link Tax 1 (7% GST) to the desired Department key:

[001] + [CHECK] + 0 + [DEPARTMENT KEY]

4. Link Tax 2 (8% PST) to the desired Department key:

[002] + [CHECK] + 0 + [DEPARTMENT KEY]

5. Link both Tax 1 (7% GST) and Tax 2 (8% PST) to the desired Department key:

[005] + [CHECK] + 0 + [DEPARTMENT KEY]

CANADIAN TAX - METHOD 2

GST Tax: 7%
PST Tax: 8%
GST/PST Tax: Both 7% and 8% calculated as tax on tax (piggyback calculation)

For the Canadian tax system of TAX on TAX:

Type **[3]**, type **[1]**, then press the **[RA]** key.

1. Program Tax 1 as 7%:

[1] + [TAX SHIFT] + [7000] + [AMT TEND/TOTAL]

2. Program Tax 2 as 8%:

[2] + [TAX SHIFT] + [8000] + [AMT TEND/TOTAL]

3. Link Tax 1 (7% GST) to the desired Department key:

[001] + [CHECK] + 0 + [DEPARTMENT KEY]

4. Link Tax 2 (8% PST) to the desired Department key:

[002] + [CHECK] + 0 + [DEPARTMENT KEY]

5. Link both Tax 1 (GST) and Tax 2 (PST) to the desired Department key:

[005] + [CHECK] + 0 + [DEPARTMENT KEY]

6. Program for tax on tax calculation (piggyback):

[5] + [1] + [RA]

For customer assistance call 1-800-543-5454.

CALCULATING STATE TAX TABLE CODES

"EXAMPLE TAX CHART"

STEP C: Enter the base tax amount (the minimum point where no tax is charged) followed by the Number "1". Then **press** the **[TAX SHIFT)** key.

STEP D: Enter the 6 digit number (see Page II-b) (i.e. 4% = 240096).

STEP E: Enter the individual "Irregular" breakpoint pattern. **Press** the **[TAX SHIFT)** key after each breakpoint. Place the number "10" before the last "Irregular" breakpoint.
(13, 19, 23, 27, 27, 1029)

STEP F: Enter the individual breakpoints of the "Regular" breakpoint pattern. **Press** the **[TAX SHIFT)** key after each breakpoint. Place the number "10" before the last "Regular" breakpoint.
(25, 25, 25, 1025)

STEP G: To summarize, combine the Steps A through F and maintain the information for future use.

121 [TAX SHIFT)
240096 [TAX SHIFT)
13 [TAX SHIFT)
19 [TAX SHIFT)
23 [TAX SHIFT)
27 [TAX SHIFT)
27 [TAX SHIFT)
1029 [TAX SHIFT)
25 [TAX SHIFT)
25 [TAX SHIFT)
25 [TAX SHIFT)
1025 [TAX SHIFT)

STEP A

STEP B Breakpoints	SALE AMOUNT from	to	TAX AMOUNT
	0	12	0
13	13	31	1
19	32	54	2
23	55	81	3
27	82	108	4
27	109	137	5
29	138	162	6
25	163	187	7
25	188	212	8
25	213	237	9
25	238		10

NOTE: A total of 63 breakpoints can be programmed on this cash register.

"THE WORKSHEET"

Write down your results as you go.

STEP C:

STEP D:

STEP E:

STEP F:

STEP G: